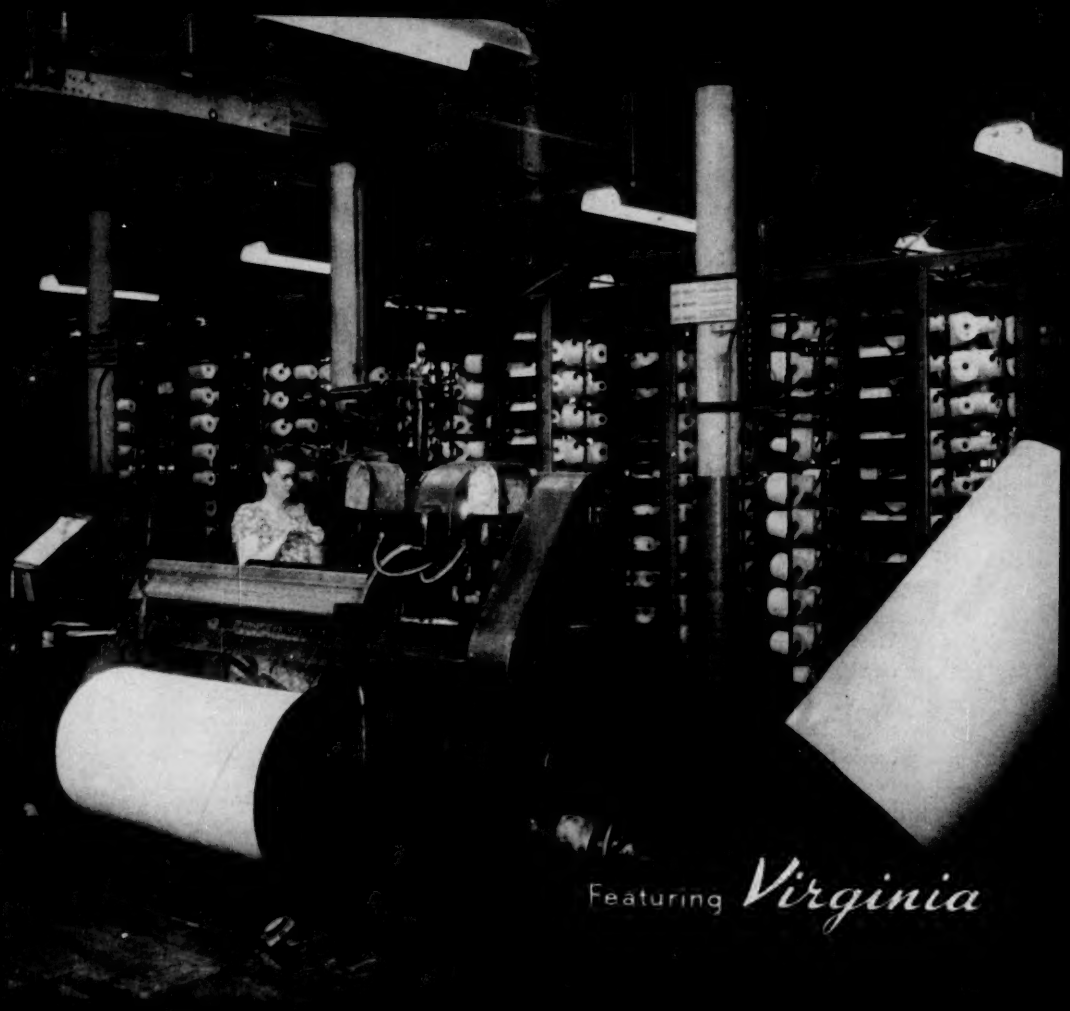


MANUFACTURERS RECORD



Featuring *Virginia*

Miller & Rhoads

THE Shopping Center



Miller and Rhoads, now, more than ever

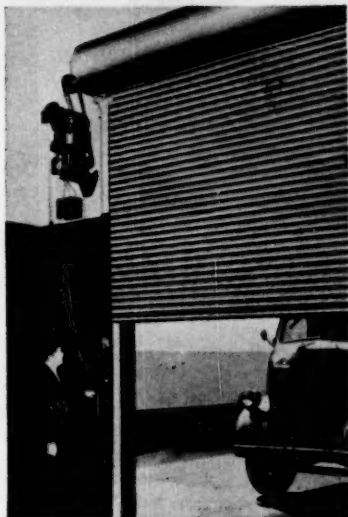
THE SHOPPING CENTER

Witness our newly enlarged home furnishings floor, the fourth, covering an entire city block, where all basic furnishings have been coordinated for easy selection. On our third floor, a complete new Sewing Center where everything to set talented fingers flying is conveniently arranged. Here you'll even find a stage for fabric fashion shows.

To the second floor and our new Beauty Salon, both beautiful and modern, newly designed with the latest equipment for efficient service and comfort. Perhaps the most beautiful department of all, M & R's new silver department with its distinctive contemporary setting, advantageously located on the street floor with a separate Broad Street entrance.

And, as if this weren't enough, Miller & Rhoads extends its expansion program to include all of Virginia. First to Charlottesville where a new branch store will open next spring, followed by an even larger branch in Roanoke bringing M & R right to the doorstep of Western Virginia.

Kinnear Rolling Doors



Door coils above the opening, completely out of the way.

Clears the entire opening — jamb to jamb, floor to lintel.

Opened door stays out of reach of wind or vehicles.

All surrounding floor and wall space is always fully usable.

Rugged all-steel curtain repels wind, fire, theft, vandalism.

Heavily galvanized curtain gives lasting resistance to elements.

(1.25 ounces of pure zinc per square foot of metal, as per ASTM standards.) Kinnear Paint Bond—a hot phosphate immersion assures thorough, lasting paint grip.

Smooth, easy coiling upward action saves time and labor.

Ideal for motor operation; remote control switches if desired.

Any size; quickly, easily installed in old or new building.

Write for Kinnear Catalogs today!

For cost-cutting answers to any door need, see these
TWO NEW CATALOGS!



Kinnear Steel Rolling Doors

With the coiling upward action of the interlocking steel-slat curtain, originated by Kinnear

Kinnear Rolling Fire Doors

All-steel "Akbar" Doors, famous for safety features and labeled by Underwriters Laboratories, Inc.

Kinnear Steel Rolling Grilles

A protective, attractive openwork of steel bars and links—admits light, air and vision

Kinnear Motor Operators

Special rugged motors for time-saving push-button door operation

Kinnear Rel-TOP Doors

Sectional upward-acting wood or all-steel doors with any number of panels for glass

KINNEAR
ROLLING DOOR

Saving Ways
in Doorways

Write for Your
Copies Today

FACTORIES IN COLUMBUS, OHIO and LOS ANGELES, CALIFORNIA

The Kinnear Manufacturing Co.

1600-20 Fields Avenue, Columbus 16, Ohio

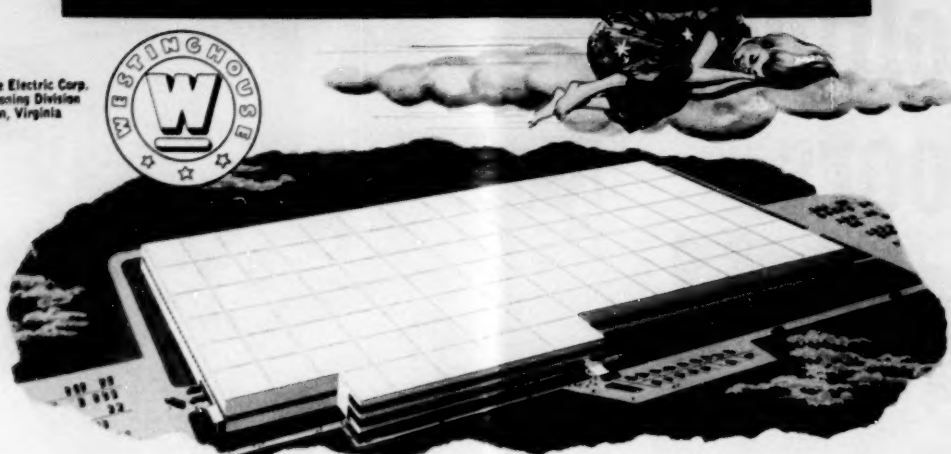
Please send new Kinnear door catalogs to:

Name _____ Title _____
Firm _____
Street _____
City _____ Zone _____ State _____

Making

Mid-Summer Nights' Dreams
come COOLER

Westinghouse Electric Corp.
Air Conditioning Division
Staunton, Virginia



Cooler, more comfortable summer nights, and days, are being manufactured on a mass-production basis at the Westinghouse Electric Corporation's new air-conditioning plant, just completed at Staunton, Virginia. At this completely modern manufacturing plant, containing more than 300,000 square feet of floor space, Westinghouse packaged air conditioners for cooling an entire home or for air conditioning stores, offices, restaurants and other establishments are being built.

Manual handling is at a minimum at this plant as overhead conveyors and crane rails move the units down efficient assembly lines. The new structure includes two-story streamlined offices ad-

joining the main building. The plant also has complete research and testing facilities.

Robert and Company Associates designed this modern air conditioning plant. With more than 39 years of experience in the South and across the nation, we have served Westinghouse and many other of America's great industrial names.

Our services are complete from start to finish, including site selection, preliminary sketches, estimates of cost, building designs and securing bids from qualified contractors. For you, this means a time-saving, one-package project without sacrificing the advantages of competitive bidding.

Without obligation, our representatives, who are in your area frequently, will be glad to explain our services in detail.

**If You're
Site-Seeking
Down South**

**ROBERT AND COMPANY
ASSOCIATES**
ENGINEERING DIVISION
ATLANTA

Serving the Great Names in Many Fields

Allis-Chalmers Manufacturing Co.
Alphons Custodis Chimney
Construction Company
American Bemberg Corporation
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Black & Decker Manufacturing Co.
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Cluett, Peabody & Company, Inc.
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Pittsburgh Plate Glass Company

Sherwin-Williams Company
The Springs Cotton Mills
Sunshine Biscuits, Inc.
United Merchants and
Manufacturers Co., Inc.
United States Envelope Company
Westinghouse Electric Corporation

West Point Manufacturing Co.

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 124

May, 1955

Number 5

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COVER ILLUSTRATION: Dan River Mills, World's largest single-unit textile mill, Danville, Va.

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MAY NINETEEN FIFTY-FIVE



The Virginian . . .

Organized in Virginia 32 years ago . . . now serving more farmers than any other cooperative in the world . . . Southern States Virginia manufacturing facilities include feed mills at Roanoke and Norfolk, fertilizer plants at Norfolk and Culpeper, a hybrid corn processing plant at Richmond.

Over 700 cooperative service agencies serving nearly 300,000 farmer-members draw their feed, seed, fertilizer and farm supplies from Southern States warehouses at Richmond, Roanoke, and six other points in a six-state territory.

Southern States Virginia facilities still produce 24% of its 500,000 annual tons of feed, 34% of its 184,000 annual tons of fertilizer, over 17% of its hybrid seed corn . . . and they have rolled up steady increases in each of these commodities year after year.

"Born and raised" in Virginia . . . with an important stake in Virginia's over-all growth and welfare . . . Southern States is proud of its continuing contribution to the home state's whole economy of farming, manufacturing and distribution.

Southern States

COOPERATIVE



Southern States Cooperative, Inc.

General Offices:

RICHMOND, VA.



It was more than just a matter of time

Great grandfather's infallible timepiece pays a fine tribute to some craftsman's personal skill. Today's mass-produced watches and clocks derive their accuracy from the high-speed fabrication of materials that must be uniformly true to close specifications.

That's why makers of watches, clocks and similar precision products have learned to demand Scovill's unique standards of uniformity—a uniformity based upon more than a century and a half of production experience and many millions of dollars invested in the development of special equipment and techniques.

Scovill customers know it's no idle claim when we say there is a difference in Scovill Brass and Aluminum Mill Products . . . a difference you can **SELL** in the superior quality of *your* fabricated products.

Scovill Manufacturing Company, 1108 East Wendover Avenue, Greensboro, N. C.

You can **SELL** the difference

SCOVILL

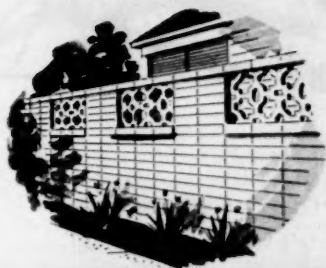
MILL PRODUCTS

BRASS • BRONZE • NICKEL SILVER • ALUMINUM

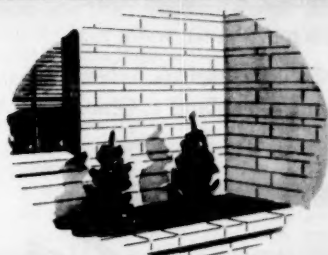
MANUFACTURERS RECORD FOR

Versatility... true

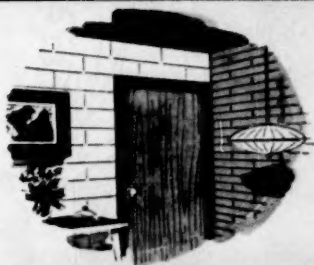
but there's More than meets the eye



4" x 16" UNITS IN STACK BOND



4" x 16" AND 2 1/2" x 16" UNITS IN RUNNING BOND



2" x 16" WITH 4" x 16" UNITS IN RUNNING BOND

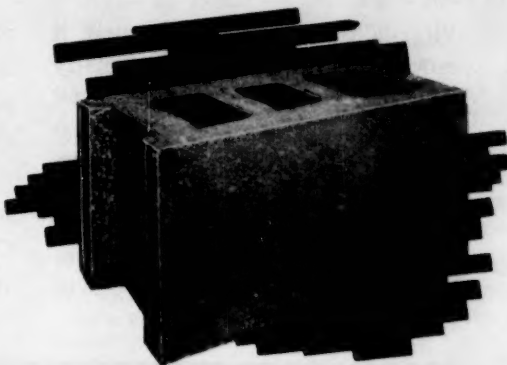


2" x 16" SPLIT UNITS IN STACK BOND WITH 8" x 16" BASKETWEAVE

with

SOLITE®

LIGHTWEIGHT MASONRY UNITS



Solite brings you a full sweep of pattern variations to open up new horizons in design achievement. And the textured smoothness of each Solite block makes design experimentation twice as rewarding. But ever so important . . .

With Solite, there is *more* than meets the eye!

Concrete units in general are known for their versatility. But only Solite offers you versatility . . . plus many outstanding construction features built into the block by carefully controlled manufacturing processes.

That beautiful texture on a Solite block is insured for life against rust and stain. Imagine! And inside each of these lightweight blocks (that are so easy to handle) are thousands of tiny sealed air cells which do a noble job of absorbing room noise and providing cost-free insulation.

No wonder there are many imitations . . . but no substitutes for Solite!

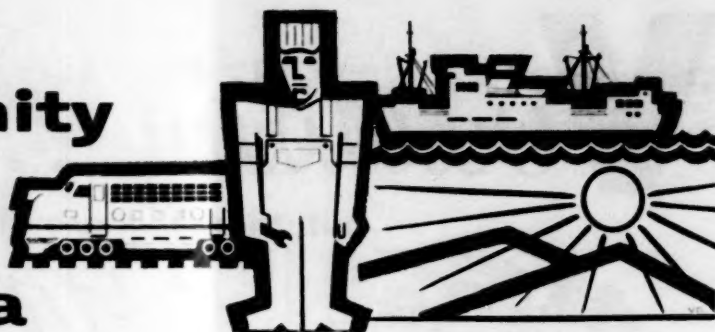
SOLITE®

PLANTS: AQUADALE, N. C.; BREMO BLUFF, VA.

OFFICES: P. O. BOX 205, RICHMOND, VA.; P. O. BOX 1843, CHARLOTTE, N. C.

REMEMBER- Architects and engineers are professional advisors. Regardless of what type of construction you are interested in, consult them. They will be glad to help you build better.

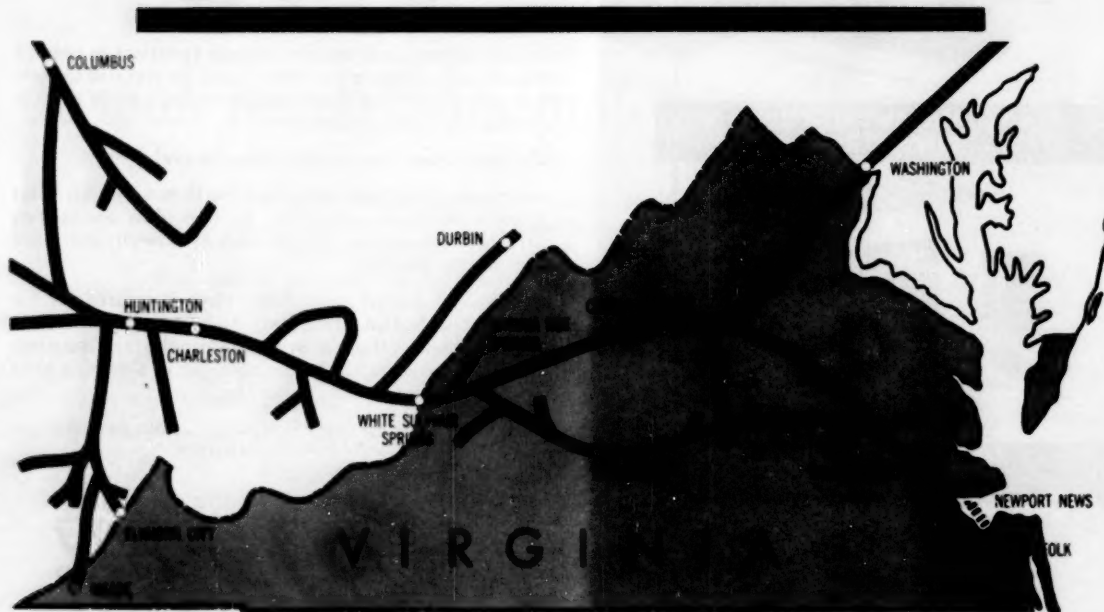
Opportunity knocks in Virginia



Virginia, once largely agricultural, is now attracting industry of many kinds, especially textile, chemical and steel. Virginia is in a strategic location for distribution with fine rail connections to all regions, particularly the southern and mid-western states. The modern port at Newport News gives Virginia fast and economical access to

world markets. Other advantages are found in the state's wealth of natural resources, a history of good labor relations and a delightful climate.

For help in finding a suitable home for your business in Virginia, write to: Chesapeake and Ohio Railway, Industrial Development, Cleveland 1, Ohio.



Chesapeake and Ohio Railway

Serving:

Virginia • West Virginia • Kentucky • Ohio • Indiana
Michigan • Southern Ontario

BUSINESS TRENDS

Business Improvement Continues

Sparked by Steel, Automobiles and Construction, business on a Nationwide basis is continuing to expand.

Of the three, Steel is still trailing somewhat the record made in 1953, but both Autos and Construction are setting alltime highs.

Even though not equal to its earlier peak, Steel was produced in the amount of 6,119,900 tons in February, highest monthly figure since October 1953 and 110,000 tons higher than production for January this year.

Sheets and strips remained the top tonnage group, reflecting the high rate of consumption in the manufacture of Motor Vehicle bodies.

Shipments to the Construction industry also rose in February to 594,660 tons, or 10.2 per cent compared to 9.6 per cent in January.

Steel mills are now operating at better than 95 per cent of capacity.

With demand for automobiles showing no signs of weakening, both production and sales ran high in February, output being at a new record high and sales sustaining levels attained in other recent months.

Building Booms On

With the end of March, the Construction industry closed the most active first quarter on record, according to estimates of the Departments of Commerce and Labor.

March activity brought the first quarter total to \$8.4 billion, an increase of 13 per cent over the like period of 1954.

This level of activity would be at the unprecedented rate of \$41 billion annually if it should continue throughout the year.

Increased activity for nearly all types of Private Construction attest to the buoyancy of business optimism and the free availability of investment funds.

Public outlays for Construction were somewhat below those of 1954's first quarter.

Nonfarm housing starts rose to 117,000 in March, completing the most active first quarter on record with respect to this category. This level would be at an annual rate of 1,407,000 private dwellings. Final reports show that 1,220,400 new dwellings were put under construction in 1954, which year was the second best of record, being 13 per cent below the peak year of 1950. In 1950, a total of 1,396,000 dwellings were started.

Other Business Expands

Along with the three foregoing bellwether industries, Business is expanding along a wide front.

While Farming and Mining are not recovering as fast

as other sectors, there are signs of improvement in each. Utilities are holding firm at or slightly above last year's level.

Finance-Real Estate also is holding steady.

Next to the three leading industries, Trade is showing best increase to date. Retail Trade especially is buoyant, with Wholesale and Service Trades doing quite well—and all reflecting a steady flow of funds in Consumers' hands and a disposition on the part of the buying public to spend freely.

Manufacturing in general has expanded with overall levels ahead of last year but not as high as for Automobile and Steel Manufacturing.

Manufacturing employment is just about on a level with last year, but more hours are being worked weekly, and weekly earnings are up substantially. Overtime in some industries is becoming quite extensive.

While there are fewer people at work in Manufacturing than there were in 1953, the earnings of those now working are ahead of the total earned in the previous year, and are therefore effective in maintaining Consumer expenditures at record levels.

Credit Expands Also

Together with Business Volume, Credit of practically all types is also expanding.

Business loans are up \$237 million from Dec. 29, 1954 to April 13, 1955, as compared to a drop of \$830 million in the same period last year.

Consumer loans also are up as reflected in increased bank loans to Finance Companies in the amount of \$197 million during the period noted, compared to a decrease of \$201 million in the like period a year ago.

Increase in Construction loans during the period was the largest increase in this category since the spring of 1951, and was spread over the entire Nation.

South Keeps Up

As a region the Blue Book South is staying right at the top of the heap in the race for Business Recovery.

Some of the 16 states have gotten the jump on the rest and at present are sprinting ahead—notably Florida, extending a boom that has gone practically unbroken for three years, Virginia which is swiftly climbing out of an overly deep trough, Mississippi which had a very bad year in Agriculture in 1954 and is doing better this year, and Arkansas which right now is entering a strong Construction revival.

Other strong states in the South are Georgia, North Carolina and Oklahoma.

(Continued on page 11)



➤ **Mechanical drawing class** of Apprentice School students at Newport News. Those who excel advance to the technical drafting departments.

➤ **Shop training scene** which shows an apprentice shaping a small die on a shaper, indicates how students are thoroughly trained.

How Skills are born...

at Newport News

Newport News utilizes the skills of almost every known trade...

And for the past three and a half decades, this Company's Apprentice School has furnished substantial numbers of the trained leaders and skilled craftsmen who make outstanding ships the tradition of Newport News.

This school's faculty... including experts for both shop practice and academic subjects... provides instruction equivalent to a Junior College education during four and five year courses.

Graduates numbering some 2200 skilled workers in 20 separate crafts comprise one more reason why quality identifies everything produced at Newport News.

Newport News

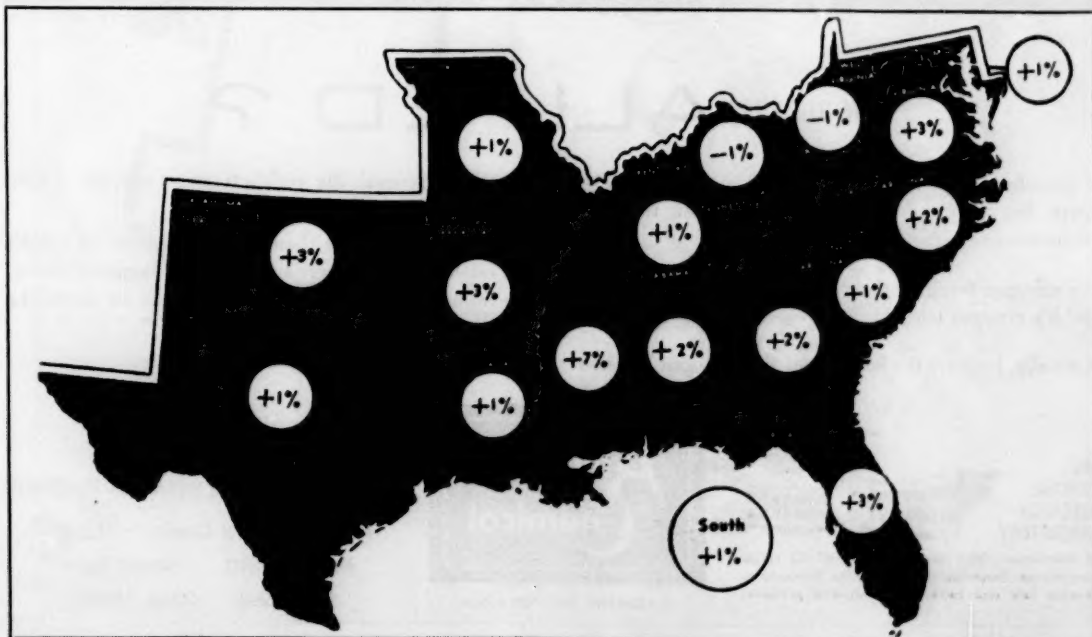
Shipbuilding and Dry Dock Company • Newport News, Virginia

SOUTHERN BUSINESS VOLUME

Business Volume by States (\$ Million)
First 2 mos. of 1955 with gain (or loss) over first 2 mos. of 1954

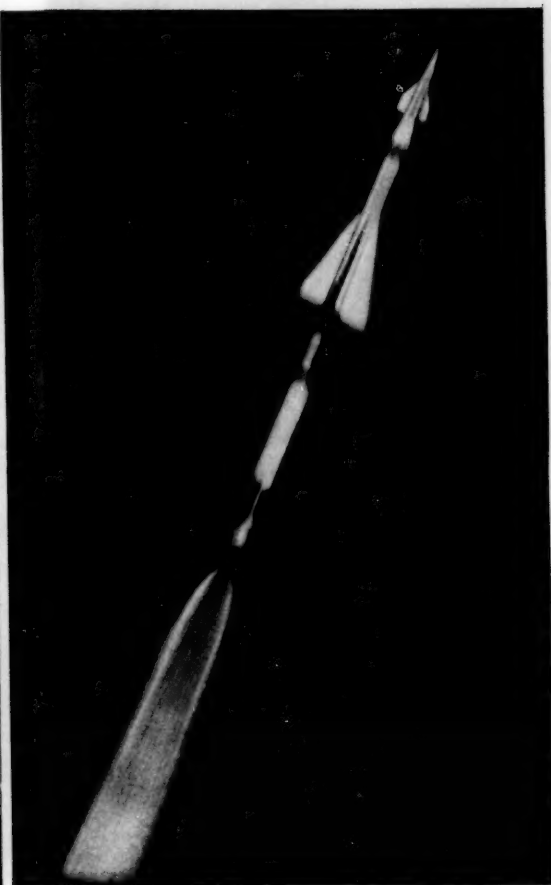
	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
Ala.	\$ 46 -16%	\$ 18 -9%	\$ 69 +23%	\$ 476 even	\$ 71 -2%	\$ 61 +3%	\$ 327 +3%	\$ 339 +6%	\$ 60 +4%	\$ 1,467 +2%
Ark.	86 -3%	20 -2%	40 +60%	157 even	42 -1%	24 even	160 +3%	205 +3%	30 even	764 +3%
D. C.	—	—	39 +25%	37 even	47 -1%	63 even	259 -3%	249 +8%	54 even	748 +2%
Fla.	124 +20%	14 even	182 +10%	262 +10%	115 +3%	118 +5%	527 -6%	653 +5%	111 +1%	2,106 +3%
Ga.	68 -3%	6 even	116 +27%	687 +5%	101 -1%	86 even	745 -5%	421 +3%	88 +1%	2,318 +2%
Ky.	143 -8%	60 -5%	81 -24%	525 +2%	83 even	48 +2%	424 -4%	393 +5%	58 +1%	1,815 -1%
La.	50 -5%	161 +13%	103 +4%	467 -1%	117 -2%	65 +5%	411 +4%	388 +6%	62 +4%	1,844 +1%
Md.	29 -2%	2 even	123 +20%	638 even	106 -3%	94 even	552 even	475 +8%	77 +2%	2,096 +1%
Miss.	72 -7%	18 -4%	37 +31%	178 +5%	38 -1%	24 even	201 +7%	209 +10%	34 +5%	811 +7%
Mo.	139 -4%	17 -1%	134 +34%	969 -1%	183 -3%	160 even	1,348 -1%	683 +8%	150 even	3,783 +1%
N. C.	57 -2%	4 even	102 even	1,118 +3%	97 -2%	76 +5%	674 even	505 +7%	82 even	2,715 +2%
Okla.	63 -4%	110 +6%	67 -1%	306 +2%	72 -1%	53 +1%	349 +2%	344 +10%	56 -3%	1,420 +3%
S. C.	26 -4%	2 even	78 -6%	472 +3%	38 -2%	34 +2%	210 even	281 +3%	38 even	1,179 +1%
Tenn.	82 -7%	10 even	123 +16%	567 +1%	85 -2%	76 +2%	733 -1%	436 +5%	84 +1%	2,196 +1%
Tex.	249 -17%	541 +1%	355 +6%	1,731 +1%	325 -2%	263 +1%	1,658 even	1,432 +4%	258 -2%	6,812 +1%
Va.	62 even	16 -1%	127 +25%	714 +1%	118 even	93 +2%	435 +10%	474 +5%	83 +6%	2,122 +3%
W. Va.	20 even	99 -15%	33 -6%	276 even	71 -2%	30 +2%	165 -8%	223 +5%	36 -1%	953 -1%
South	1,316 -7%	1,098 -1%	1,809 +9%	9,600 +1%	1,709 -2%	1,368 +2%	9,178 +1%	7,710 +6%	1,361 +1%	35,149 +1%

(Continued from page 9 and on page 13)



MORE FERTILE FIELDS

. . . OR STREAK IN THE SKY



Department of Defense photo

how are they **ALLIED** ?

A peaceful farm and a roaring rocket may seem worlds apart, but they have one very important thing in common—fixed nitrogen.

It's nitrogen fertilizer that keeps the farm productive—and it's nitrogen tetroxide that powers rockets.

Naturally, both are the business of the Nitrogen Division

of Allied Chemical, the world's foremost supplier of fixed nitrogen in its many forms.

When you add in the thousands of products of Allied's six other divisions, there's probably no home or family, no farm or business, that doesn't depend on something Allied Chemical makes.

Something we keep trying to make...better!

**THE
CENTRAL
RESEARCH
LABORATORY**



at Morristown, New Jersey, is one of 13 major laboratories. These facilities enable the Company to develop new and better processes and products.

**Allied
Chemical**

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DIVISIONS PRODUCING
"Chemicals Vital to American Progress"

Barrett	General Chemical	Nitrogen
Mutual Chemical	National Aniline	
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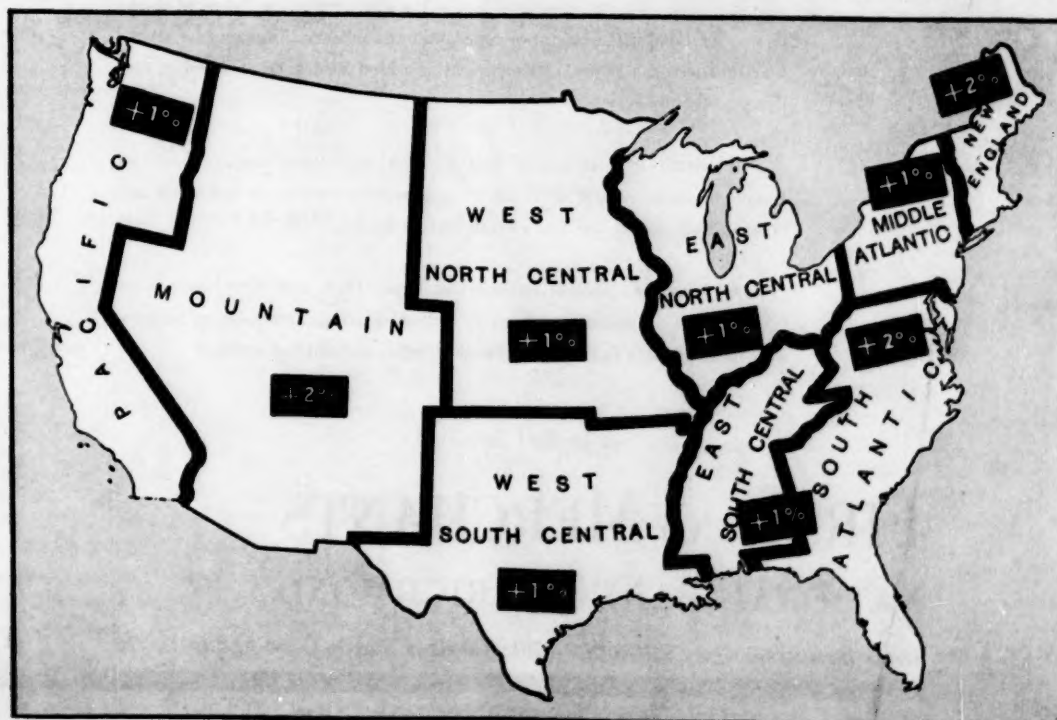
MANUFACTURERS RECORD FOR

NATIONAL BUSINESS VOLUME

Business Volume by Regions (\$ Million)
First 2 months of 1955 with gain (or loss) over first 2 months of 1954

	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
New Eng.	\$ 128	\$ 9 even	\$ 299 +23%	\$ 2,949 even	\$ 313 even	\$ 421 +2%	\$ 1,616 even	\$ 1,783 +6%	\$ 320 +3%	\$ 7,838 +2%
Mid. Atl.	287	137 -19%	1,086 +22%	9,893 even	1,397 -3%	1,615 +1%	10,821 even	5,231 +7%	1,508 +1%	31,975 +1%
E. N. Cen.	943	144 even	1,059 +15%	13,065 even	1,217 even	1,100 +3%	8,353 even	5,731 +5%	1,211 +1%	32,823 +1%
W. N. Cen.	1,386	155 even	439 +22%	3,162 even	572 even	464 +1%	4,069 even	2,477 +7%	427 +1%	13,151 +1%
S. Atl.	398	143 -14%	823 +11%	4,316 +2%	708 even	608 +2%	3,639 even	3,355 +5%	581 +2%	14,571 +2%
E. S. Cen.	343	106 -8%	310 +4%	1,746 +1%	277 -1%	209 +3%	1,685 even	1,377 +7%	236 +4%	6,289 +1%
W. S. Cen.	448	832 +3%	565 +6%	2,681 even	556 -1%	405 +2%	2,578 even	2,369 +6%	406 even	10,840 +1%
Mount.	314	251 +1%	197 +11%	671 +3%	235 -2%	143 +4%	893 +4%	913 +5%	163 +1%	3,780 +2%
Pacif.	471	209 even	651 +10%	4,046 +2%	642 even	595 +3%	3,359 even	2,793 +6%	713 +1%	13,479 +2%
U. S.	4,718	1,986 -2%	5,429 +14%	42,529 even	5,917 even	5,560 +2%	37,013 even	26,029 +6%	5,565 +1%	134,746 +1%

(Continued from page 11 and on page 15)



Virginia's Commercial Bank!



WHEN you are looking over industrial locations and markets don't underestimate the importance of the commercial bank.

As the largest bank in Virginia First and Merchants offers you such essential services as commercial checking accounts, commercial loans and credit information. Our Foreign Department provides facilities for commercial letters of credit, the collection of export drafts and the financing of international trade. We can also serve you as transfer agent or registrar of stocks, as dividend disbursing agent or redemption or subscription agent for stocks. Our location in a Federal Reserve city is added assurance of speed in handling your business.

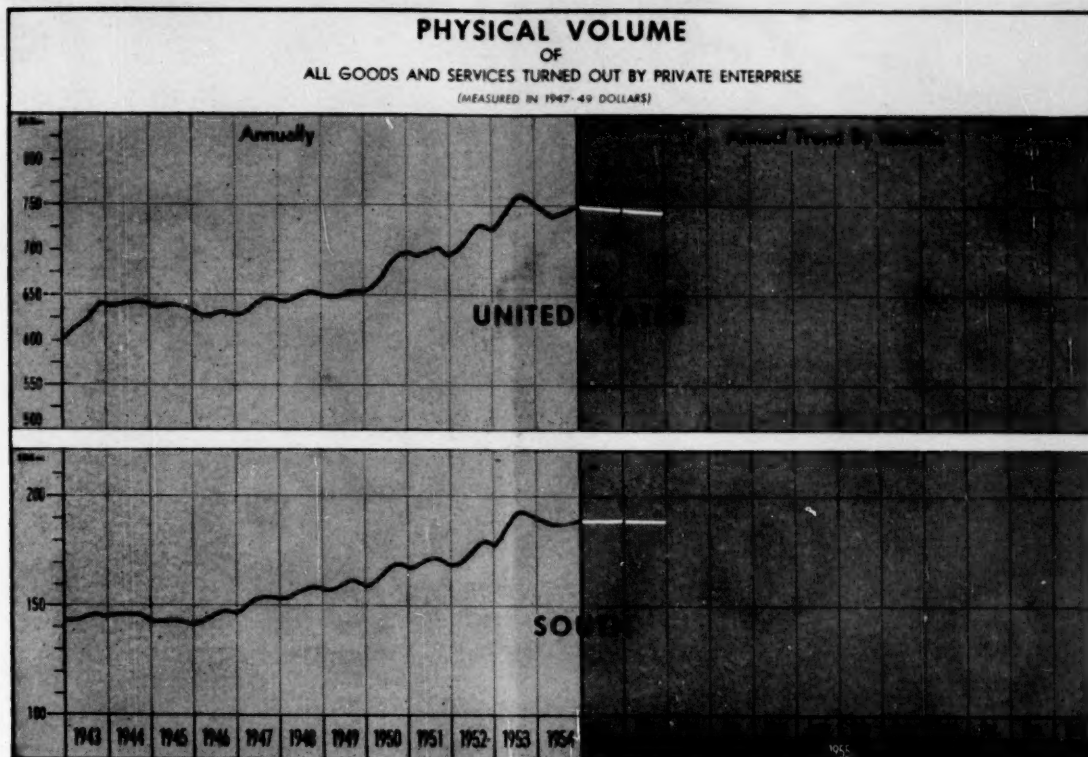
Wherever it suits you to locate in the state these modern facilities, financial resources and skills are at your service directly or indirectly as a customer of one of our fine correspondent banks.

As Virginia's largest commercial bank, First and Merchants is exceptionally well qualified and happy to furnish you information on business and industry in Virginia and complete, efficient banking service.

FIRST AND MERCHANTS NATIONAL BANK OF RICHMOND

Total Resources Over \$200,000,000—Capital Funds Over \$12,000,000

Member Federal Deposit Insurance Corporation



(Continued from page 13)

Regional Indicators

Farm Marketings (\$ Mil.)

	Feb. 1955	Jan. 1955	Feb. 1954
South	\$ 453	\$ 730	\$ 485
Other States	\$1,464	\$1,806	\$1,443
United States	\$1,917	\$2,536	\$1,928

Construction (\$ Mil.)

	Feb. 1955	Jan. 1955	Feb. 1954
South	\$ 896	\$ 913	\$ 809
Other States	\$1,746	\$1,874	\$1,509
United States	\$2,642	\$2,787	\$2,318

Mineral Output (\$ Mil.)

	Feb. 1955	Jan. 1955	Feb. 1954
South	\$ 555	\$ 540	\$ 551
Other States	\$ 442	\$ 440	\$ 467
United States	\$ 997	\$ 980	\$1,018

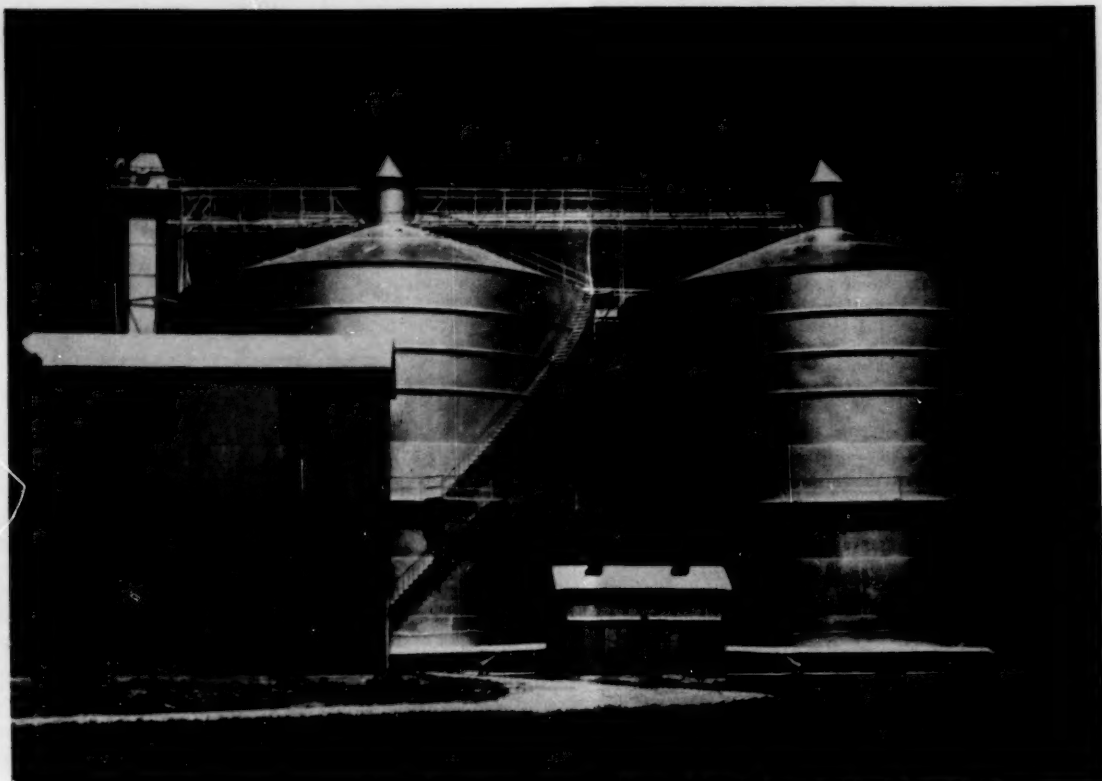
Manufacturing (\$ Mil.)

	Feb. 1955	Jan. 1955	Feb. 1954
South	\$ 4,852	\$ 4,748	\$ 4,681
Other States	\$16,647	\$16,282	\$16,262
United States	\$21,499	\$21,030	\$20,943

National Indicators

	Latest Month	Previous Month	Year Ago
Personal Income (\$ Bil.)	\$ 292.4	\$ 291.4	\$ 285.0
Ave. Weekly Earnings (Mfg.) ..	\$ 75.30	\$ 74.34	\$ 71.28
Consumer Credit (\$ Mil.) ..	\$ 29,518	\$ 29,760	\$ 28,140
New Mfg. Orders	\$ 25,314	\$ 24,976	\$ 21,526
Mfg. Inventories (\$ Mil.)	\$ 43,885	\$ 44,025	\$ 46,355
Trade Inventories (\$ Mil.) ..	\$ 33,759	\$ 32,708	\$ 33,964
Bank Debits (\$ Mil.)	\$178,914	\$149,718	\$141,926

	Latest Month	Previous Month	Year Ago
Ave. Weekly Hours (Mfg.)	40.7	40.4	39.6
Carloadings	2,575	2,518	2,967
Consumer Prices ('47-'49=100) ..	114.3	114.3	115.0
Retail Prices ('35-'39=100)	207.6	207.3	208.9
Wholesale Prices ('47-'49=100) ..	110.0	110.4	110.5
Construction Costs ('47-'49=100) ..	123.4	123.4	121.0
Electric Output (mil. kw. hrs.) ..	46,269	50,404	40,887



**CB&I tanks like these may
be your answer for
clean, dry storage**

Shown are two 200,000-bushel Horton® steel tanks installed for soybean storage at the Osceola Products Company, Osceola, Arkansas. They are 70-feet in diameter and 60-feet high. A ventilating system in the bottom of each tank draws air down through the seed and cools it whenever excessive moisture causes the contents of the tank to become heated.

Perhaps this installation will suggest the answer to a problem that you may have involving the storage of clean, dry, free-flowing products.

Write our nearest office for estimates or quotations on any type of storage tank for liquids, gases, or free-flowing solids.



Chicago Bridge & Iron Company

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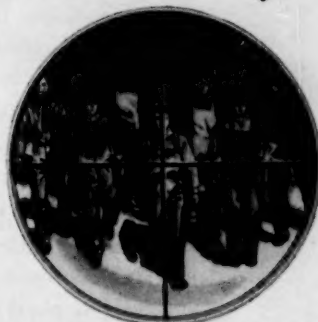
San Francisco • Seattle • Tulsa • Washington

Plants in BIRMINGHAM, CHICAGO, SALT LAKE CITY and GREENVILLE, PA.

Take a **LONG LOOK** at the *Land of Plenty*



Plenty of room to grow with ideal plant sites to meet your specific needs.



Abundance of loyal, productive manpower, both skilled and unskilled.



Plenty of natural resources . . . adequate power and industrial water.

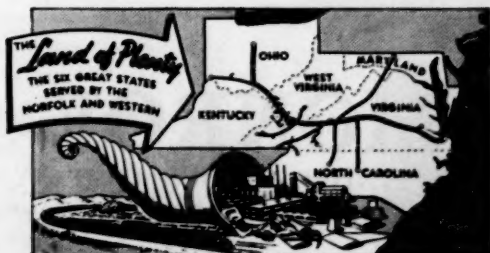


Nearness to established markets . . . as well as booming new ones . . . and next door to world markets via the Port of Norfolk on famed Hampton Roads.

There are many advantages in the great and growing Land of Plenty — important advantages like equable climate, friendly progressive communities with favorable tax structures, dependable N & W transportation with close connections to suppliers and markets. Frankly, we would like to tell you more about them. Just send an outline of your requirements. You will receive without obligating yourself in any way — a concise but complete run-down of facts and figures about the Land of Plenty — as they apply to *your* operation. Your inquiry will be handled in strictest confidence. Let the N & W help you take a long look at the Land of Plenty.

Just Write, Wire or Call —

INDUSTRIAL AND AGRICULTURAL DEPT.
Drawer MR-606 (Phone 4-1451, Ext. 474)
Norfolk and Western Railway
ROANOKE, VIRGINIA



Norfolk and Western RAILWAY

We came South ...and we're glad!

Eight years ago Monroe started to make adding machines in the South and the office machine industry lifted its eyebrows. Nobody had done it before.

Lacking such special skills, could workers be trained to fashion the precision parts? Could these parts be assembled in the complex miracle that is today's office machine?

Now those questions have been fully and definitely answered. Monroe doubled the capacity of its plant in Bristol, Va. Leaders

of Southern business, government, and journalism gathered at the ceremonies marking the dedication of the enlarged factory.

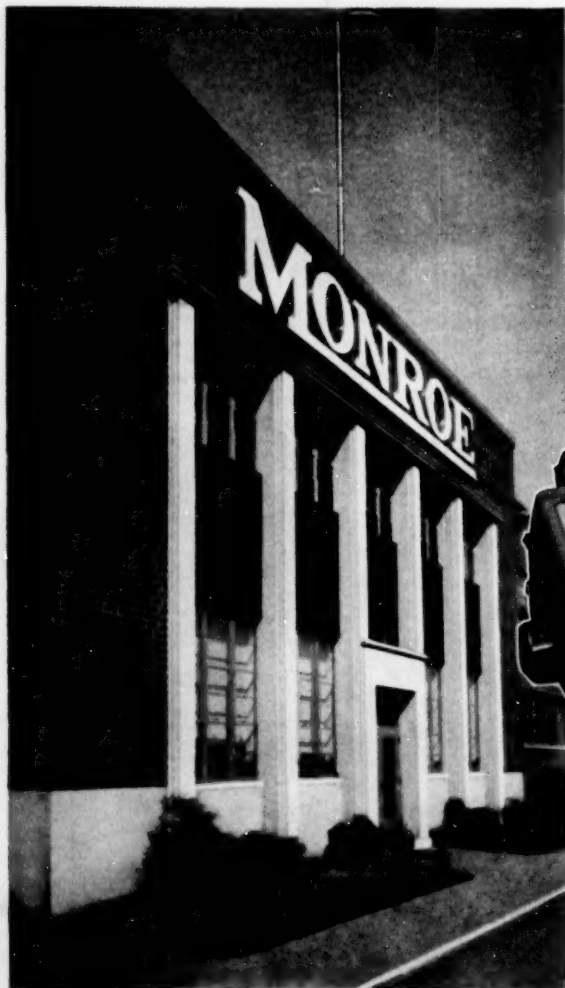
Said Senator Harry F. Byrd

"I congratulate you. Not only has Monroe brought new labor skills to this area, but by its very product the company has contributed to the industrial development of the entire South through increased office efficiency."

Said the Virginia-Tennessean

"Bristol and the South are proud of Monroe. They have proved what Bristolians and Southerners have known all along—that the most fertile territory for profitable industrial expansion lies in the Appalachian area and other parts of the South where 'folks' still feel there is honor in work. We congratulate Monroe and look forward to the early day when they can double their facilities again."

Monroe is grateful to its workers in Bristol, through whose skill and vigor more and more adding machines are being produced. And Monroe is grateful to Southern business and industry for buying these machines in such numbers that more plant and more people have been needed to make them.



One of the more than 50 models of Monroe Adding and Accounting Machines made in Bristol, and the plant in which they are built.

MONROE
CALCULATING MACHINE COMPANY
Bristol, Va.-Tenn., Orange and Morris Plains, New Jersey
Amsterdam, Holland

NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

ANNISTON—Alabama Pipe Co., 2006 McCoy St., let contract to Andrew Dawson & Shenesey, Anniston, at \$300,000 for foundry building addition.

ASHLAND—Gaye Manufacturing Co. let contract to H. B. Barrett at \$100,000 for manufacturing plant. H. L. Holman, Jr., Ozark, Ala., Archt.

BIRMINGHAM—Auto Electric & Carburetor Co., Inc., c/o E. J. Hodges, president, 2100 S. Second St., Birmingham, let contract to Raymond Strygle Constr. Co., Homewood, Ala., at \$50,000 for parts and service building. Evan M. Terry, Birmingham, Archt.

BIRMINGHAM—Firestone Tire & Rubber Co., 220 S. 20th St., let contract to Brice Bldg. Co. for warehouse and office building.

BIRMINGHAM—Godwin Radio Co. received bid from Martin Clem at \$56,078 for sales and service building, 4th Ave. S., and 32nd St. Chas. H. McCauley, Archt.

BIRMINGHAM—Hill Grocery Co. let contract to Curtis Hooks, for warehouse, 16th St. & 2nd Ave., South. Henry Sprott Long, Brown Marx Bldg., Birmingham, Archt.

BIRMINGHAM—McCall Mfg. Co. plans \$200,000 factory building, 1st Ave. & No. 77th St. Martin J. Lide, Archt.

BIRMINGHAM—Seven-Eleven Enterprises let contract to C. F. Hooks at \$60,000 for office building, 711 Eleventh St., S. Lawrence S. Whitten, Archt.

BIRMINGHAM—Southern Can Corp., Birmingham, J. D. Stewart, president, plans manufacturing plant in Pinson Valley.

BIRMINGHAM—Southern Electric Steel Co. plans \$1,000,000 steel mill at 2301 Huntsville Road. Hugh Biglier & Roy W. Scholl, 6104 First Ave., S., Archts.

FAYETTE—Gas Board of City of Fayette received bid of \$58,327 from Construction Engineers, Jasper, for utilities building, Wm. I. Rosamond, Tuscaloosa, Ala., Archts.

GADSDEN—Allis-Chalmers Mfg. Co., Chicago, to construct plant for manufacture of transformer—to cost several million dollars.

HOBBS ISLAND (Madison Co.)—Norton Co., Wooster, Mass., Milton F. Higgins, president, to construct \$1,250,000 manufacturing plant for abrasives.

HUNTSVILLE—Huntsville Electricity Department plans \$800,000 shops and auditorium, Turner & Northington, Archts.

HUNTSVILLE—Huntsville Times received bids for newspaper building. Warren Knight & Davis, Birmingham, Archt.

MARSHALL CO.—Pat M. Courington, Albertville, Ala., received bid from H & H Constr. Co., Albertville, at \$74,474 for radio and press building. Frank Y. Petet, Gadsden, Ala., Archt.

FLORIDA

FORT PIERCE—Frontier Refining Co. of Denver plans \$16,000,000 refinery.

LIVE OAK—Suwannee Valley Electric Cooperative has REA loan approved for miscellaneous equipment and facilities at \$100,000.

MIAMI—Florida Power & Light Co. let contract to M. R. Harrison Construction Corp., 630 N.W. 54th St., at \$118,400 for addition to transformer building, 678 N.W. 7th St.

GEORGIA

AMERICUS—Manhattan Shirt Co., New York, plans addition to plant.

ATLANTA—Carling Brewing Co., Cleveland, Ohio, Ian R. Dowie, president, plans multi-million dollar brewery.

COLUMBUS—Marimar Corp. received bids for recreation center. E. Oren Smith, 1236 Wildwood Ave., Archt.

MACON—Armstrong Cork Co., Lancaster, Pa., plans to double present capacity of fiberboard mill. H. R. Peck, Vice-Pres. & Genl. Mgr.

SANDERSVILLE—Thiele Kaolin Co. received bid of \$38,700 from H. L. McCaskill for office building, N. J. Pascullia, 174 New St., Macon, Archt.

KENTUCKY

HENDERSON—Funeral Directors Mfg. & Supply Co., Stanley H. Maas, president, Louisville, to construct plant to manufacture plastic burial vaults and aluminum caskets.

LOUISVILLE—Reynolds Metals Co. plan

\$2,000,000 plant for coloring of aluminum building material. Building to cost \$250,000; equipment installed \$1,750,000.

LOUISIANA

LAKE CHARLES—Magnolia Petroleum Co. let contract to David Miller & Co., Box 425, for building in 1100 block Ryan St. R. L. Miller, 72½ Ryan St., Archt.

NEW IBERIA—United Gas Corp., 120 Iberia St., received bid of \$179,971 from M. & L. Constr. Co., Kaplan, for gas warehouse and center.

NEW ORLEANS—Ideal Cement Co., George Wiley, Chief Engr., National Bldg., Denver 2, Colo., let contract to Rust Engineering Co., 2109 Fifth Ave., N., Birmingham 3, Ala., for additional cement storage facilities and truck and barge loading facilities at plant 5301 Burma Road.

NEW ORLEANS—Andrew Louis Schneider, Pere Marquette Bldg., Archt., received bid from Haase Constr. Co., Inc., 424 S. Anthony St., at \$102,000 for net office and warehouse building on Leonidas St.

SHREVEPORT—Delta-Desco received bid of \$51,000 for office and warehouse building, 539 Aero Drive, from Ed Brockhaus, Shreveport, Ralph O. Kiper, 619 Milam St., Archt.

SHREVEPORT—KTBS TV Station, 312 E. Kings Highway, Shreveport, let contract to Southern Builders, Inc., P. O. Box 1815,

center at 4904 Harford Road. James R. Edmunds, Jr., 1025 St. Paul St., Archt.

BALTIMORE—Marlin G. Geiger, president, Davison Chemical Co., division of W. R. Grace & Co., to construct \$4,000,000 plant for manufacture of petroleum cracking catalysts at Curtis Bay, Md.

BALTIMORE—H. B. Davis Paint Co., 1401-1415 Severn St., let contract to Davis Constr. Co., 520 W. 24th St., Balto. 11, at \$15,000 for office addition.

BALTIMORE—Elite Laundry received bids for alterations and additions, 1920 Clifton Ave. Jamison & Marcks, 8 E. Mulberry St., Baltimore, Archts.

BALTIMORE—Gunther Brewing Co., 1211 S. Conkling St., received bids for warehouse and bottling plant, and conveyor bridges, Toone & S. Conkling St.

BALTIMORE—David Hand, Dickman St., let contract to O. E. Henning Constr. Co., 212 S. Tyrone Road, Balto. 12, at \$18,000 for warehouse at 2512 Erick St.

BALTIMORE—Independent Can Co., 900 S. Lakewood Ave., let contract to Kirby & McGuire, Inc., 2515 Greenmount Ave., Baltimore 18, for warehouse addition.

BALTIMORE—Kieckhefer Container Co., 6401 Quad Ave., let contract to S. S. Jacobs Co., Independent Life Bldg., Jacksonville, Fla., at \$57,000 for warehouse addition, Quad Ave.

BALTIMORE—Maryland Workshop for Blind, 601 N. Fulton Ave., let contract to Colwill Construction Co., 2114 Maryland Ave., at \$424,400 for training and work center, 2801 Strickland St. Wm. F. Stone, Jr., 2612 N. Charles St., Archt.

BALTIMORE—Charles Neubert & Co., 114 E. York St., let contract to Anchor Constr. Corp., 6 W. 23rd St., Baltimore 18, for packing building. Richard F. Cook, Archt.

BALTIMORE—Red Line, Inc., 2310 Orange Ave., N.E., Roanoke, Va., let contract to Anchor Constr. Co., 6 W. 23rd St., Baltimore 18, at \$60,000 for terminal at 2723 Old Annapolis Road.

BALTIMORE—Southern States Grain Marketing Corp., 2101 E. Fort Ave., let contract to Aeroglide Corp., 510 Glenwood Ave., Raleigh, N. C., at \$35,000 for grain dryer.

BALTIMORE—Sun Oil Co. plan office and garage alterations, 1910 Russell St., to cost \$30,000. A. C. Strong, Archt.

BALTIMORE—Union Bros. Furniture Co., 37 W. Cross St., let contract to Feldman Constr. Co., 3206 Labyrinth Road, at \$35,000 for office and building.

GLEN BURNIE—C. & P. Telephone Co., Lexington Bldg., Baltimore, Md., received bids for Glen Burnie Center. Taylor & Fisher, 1012 N. Calvert St., Archt.

MIDDLE RIVER—Glenn L. Martin Co. let contract to Wm. T. Lyons Co., Inc., 1700 Friendship St., Baltimore 18, at \$47,662 for I.M.B. Computer facilities, "C" building.

MIDDLE RIVER—Glenn L. Martin Co. received bids for addition to electric test building.

PIKESVILLE—C. & P. Telephone Co., Lexington Bldg., Baltimore, Md., let contract to Colwill Constr. Co., Inc., 2114 Maryland Ave., for addition to Pikesville dial center, 400 Reisterstown Road. Taylor & Fisher, 1012 N. Calvert St., Baltimore, Archt.

TIMONIUM—Triumph Corp., 1727 E. Joppa Road, Baltimore, let contract to William H. Sands, 407 York Road, at \$118,960 for office and warehouse. Wilson & Christie, 403 Washington Ave., Baltimore 4, Archts.

MISSISSIPPI

CLARKSDALE—American Hardware Corp., Memphis, Tenn., received bids for
(Continued on next page)

New and Expanding Plants

Reported in April 1955

104

First Four Months of 1955

418

First Four Months of 1954

439

Shreveport, for additions and alterations to TV Station Building. Lester Haas, Shreveport, Archt.

VINTON—Vinton Co-op Rice Drier, Inc., let contract to W. B. Smiley Steel Co., Inc., Box 30, Lake Charles, La., at \$132,625 for rice drier and storage bins.

WESTGEO—National Gypsum Co., Buffalo, N. Y., let contract to Gervais F. Favrot Co., Inc., 330 Balter Bldg., New Orleans, and Fruin-Colmon Contracting Co., Balter Bldg., for wallboard and plaster plant.

MARYLAND

ANNE ARUNDEL COUNTY—C. & P. Telephone Co. let contract to Fidelity Constr. Corp., Munsey Bldg., Baltimore, Md., for radio station at Bodkins Point. Anne Arundel County, Taylor & Fisher, 1012 N. Calvert St., Baltimore, Md., Archts.

BALTIMORE—American Radiator & Standard Sanitary Corp., 5405 Holabird Ave., Baltimore 24, let contract to Morrow Bros., Inc., 2315 N. Charles St., Baltimore 18, for new cooling shed and extension of enamel shop.

BALTIMORE—Baltimore Luggage Co., 304 N. Smallwood St., let contract to Samuel A. Kroll, Inc., 4101 Springdale Ave., Baltimore 7, at \$46,000 for addition to buildings at 304 N. Smallwood St.

BALTIMORE—Baltimore Transfer Co., Monument & Dean Sts., received bids for office alterations.

BALTIMORE—C & P Telephone Co., Lexington Bldg., received bids for accounting

GALVANIZING

Prompt Delivery • Zinc and Cadmium Plating

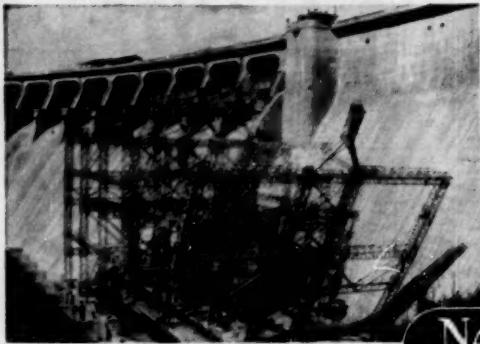
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METALPLATE CO.

757 N. 44th St.

Birmingham, Ala.



THE Nashville Bridge Company will gladly quote on structural steel requirements anywhere in the South and Southwest. Our skill in the fabrication and erection of intricate steel structures is well known. We are particularly qualified to supply the Power Distributing Industries with transmission towers and switchyard structures—hot-dip galvanized after fabrication. Fabrication and erection of both steel and machinery for movable type bridges is a specialty. Look to Nashville for simple steel requirements as well as intricate structural jobs.

Plants and offices in Nashville, Tennessee and Bessemer, Alabama. We also own and operate the Bessemer Galvanizing Works—largest galvanizing plant in the South.



NASHVILLE BRIDGE COMPANY
NASHVILLE, TENN. — BESSEMER, ALA.

NEW AND EXPANDING PLANTS

(Continued from preceding page)

manufacturing plant. R. W. Naef, Pritchard & Nichols, Memphis, Archts.

CORINTH—City received bids for plant and office building on Oil Mill Road, 1 mile off Highway 72, for Rudolph Wurritzer Piano Co. Bond issue of \$850,000 voted. John J. Turner & Assoc., 1061 Milner Bldg., P. O. Box 1348, Jackson, Miss., Archts.

DECATUR—Board of Supervisors of Newton Co., Decatur, received bids for factory for Decatur Shirt Co., Beat One, Newton County; to be occupied by Imperial Shirt Co. of New York. \$175,000 bond issue approved. Robt. A. Clopton, Box 149, Roebuck Dr., Meridian, Miss., Archt.

LAUREL—Norris Dispensers, Inc., J. Y. Downing, Jr., Gen. Mgr., East 13th St., received bids for additions to plant, estimated to cost \$150,000. Robert A. Clopton, Box 149, Meridian, Miss., Archt.

SUMMIT—Board of Supervisors of Pike Co., Magnolia, Miss., received bid from Sherman Constr. Co., Box 1031, McComb, Miss., at \$195,790 for factory and office building near Summit, Curtis & Davis, 338 Baronne St., New Orleans, La., Archts.-Engrs.

VICKSBURG—Spencer Chemical Co., Kansas City, Mo., plans \$1,500,000 addition to its nitric acid and ammonia solution plant.

YAZOO CITY—Board of Supervisors of Yazoo County Courthouse received bids for new sewing plant building in Yazoo County. Walk C. Jones, Jr., 1215 Poplar Ave., Memphis, Tenn., Archt.

MISSOURI

ST. LOUIS—U. S. Mengel Plywoods, Inc., 4268 Utah St., received bids for warehouse at Morganford & Utah Sts. Froese, Maack & Becker, 706 Olive St., Archt.

NORTH CAROLINA

ACME—Riegel Paper Co., 262 Madison Ave., New York, plan expansion of Riegel Carolina Corp. Kraft and semi-chemical pulp mill division; estimated cost \$5,800,000.

ALBEMARLE—Wiscasset Mills Co. let contract to John V. Barger & Co., Mooresville, N. C., at \$60,984 for addition to hosiery mill.

FAYETTEVILLE—American Bakeries received bid from Southern Builders, Box 1016, at \$337,446 for additions and alterations to plant. Stevens & Wilkinson, 157 Luckie St., N.W., Atlanta, Ga., Archts.

GREENSBORO—Duke Power Co. plans \$1,000,000 expansion for next ten years.

HICKORY—Shuford Mills let contract to Guy Frye & Sons, Inc., at \$163,759 for mill addition.

HIGH POINT—Heritage Furniture Co. let contract to H. L. Coble Constr. Co., Greensboro, at \$374,000 for new plant. Biberstein, Bowles & Meacham, Inc., Charlotte, Archts.

HIGH POINT—National Food Stores plan to construct 75,000 sq. ft. addition. Now erecting \$160,000 warehouse and office building.

LAURINBURG—Southern Bell Telephone Co. received bids for dial and toll office building. J. N. Pense & Co., Charlotte, N. C., Archts.-Engrs.

OXFORD—Oxford Future Industries let contract to Hunt Construction Co., Durham, at \$60,000 for building for Oxford Fabrics Corp. Frank B. Simpson, Raleigh, Archt.

WADESBORO—N. C. Telephone Co., Matthews, N. C., let contract to Myers & Chapman, Inc., Charlotte, at \$56,132 for telephone building. Higgins & Ferebee, Charlotte, N. C., Archts.

SOUTH CAROLINA

CHARLESTON COUNTY—Manhattan Shirt Co., New York, plan \$600,000 plant.

CLEMSON—Utica Division of J. P. Stevens Co. let contract to Daniel Constr. Co., Greenville, S. C., at approximately \$265,000 for addition to mill.

COLUMBIA—Columbia Products Co. let contract to General Constr. Co., Columbia, at \$30,400 for warehouse. LaFaye, Fair, LaFaye & Assoc., Archts.

GEORGETOWN—International Paper Co. let contract to Utilities Constr. Co., Charles-

ton, at \$94,766 for transmission line and sub-stations.

GREENVILLE—C. Douglas Wilson, R. A. Jolley and P. D. Meadows received bid from Fletcher J. Capell Constr. Co. at \$40,739 for I.M.B. Building. Braxton H. Williams, Archt.

TENNESSEE

CHATTANOOGA—Chamberlain Co. plan building at 741 McCallie Ave., estimated to cost \$125,000, for lease to National Cash Register Co. Harrison Gill & Associates, Archts.

CHATTANOOGA—Chattanooga Glass Co. let contract to John Martin Co. at an estimated more than \$100,000, for 2-story addition in Alton Park. Part of \$750,000 expansion program. Seimon T. Franklin, Archt.

CHATTANOOGA—R. L. Harris, Inc., let contract to John Martin Co. at \$90,000 for new building on 23rd St.

CHATTANOOGA—Heavy Minerals Co., subsidiary of Crane Co., plan chemical extraction plant at an estimated cost of several million dollars.

MEMPHIS—Memphis Packing Co. (Armour Co.) received bids for plant addition.

OAK RIDGE—Atomic Energy Commission plan research reactor building at Oak Ridge National Laboratory.

SHELBY CO.—J. Seddon Allen let contract to Dougherty-Liddell Constr. Co., Box 2839, Memphis, at \$1,812,437 for distribution center. Walk C. Jones, Jr., 1215 Poplar St., Memphis, Archt.

TEXAS

AMARILLO—B.O.B. Corp. let contract to Floyd Richards, Box 532, at \$79,990 for Amarillo Agency Building, 15th Ave. & Tyler St., for Southwestern Life Ins. Co. Grayson Gill & Assoc., 1913 San Jacinto St., Dallas, Archts.

CARRIZO SPRINGS—Ben Parker, Pleasanton, Texas, has FCC approval for radio sta-

(Continued on page 143)

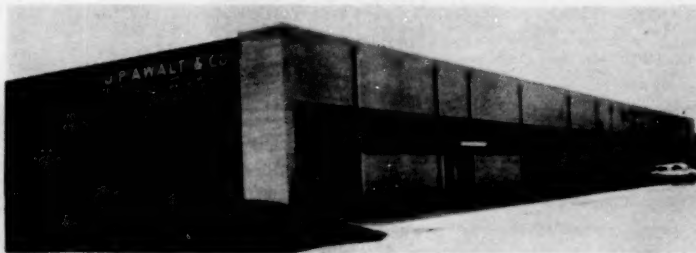
TRINITY INDUSTRIAL DISTRICT

"Under the
Skyline
of Dallas"

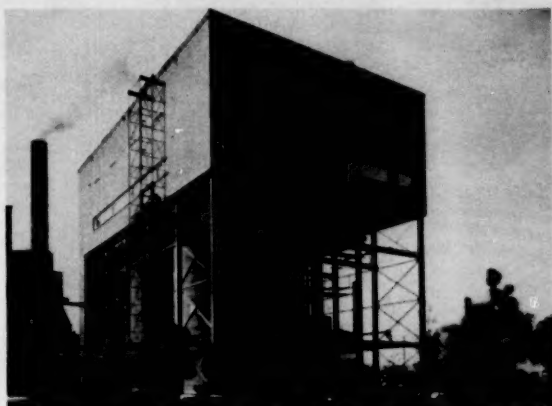
The new warehouse of

J. P. AWALT AND CO.

For information about property in the Trinity Industrial District consult your real estate broker or . . .



INDUSTRIAL PROPERTIES CORPORATION, 401 Davis Bldg., Dallas, RI-6552



Bleach Plant, Camp Manufacturing Company, Franklin, Va.



Fuel Pier, Naval Schools Mine Warfare
Yorktown, Va.



Waste Treatment Plant, West Virginia Pulp and Paper Co., Covington, Va.



Elizabeth River Bridge and Norfolk-Berkley Approaches, Norfolk, Va.

With its well-rounded staff of trained engineers, **TIDEWATER CONSTRUCTION CORPORATION** is prepared to handle your problems of all types of Industrial Plant Construction as well as Heavy Construction.

Our experience includes Paper and Pulp Mills . . . Fertilizer, Gypsum and Chemical Plants . . . Boiler Plants . . . Petroleum, Ore and Coal Loading and Unloading Facilities . . . Piers . . . Bridges . . . Marine Railways . . . Dry-Docks . . . Bulkheads . . . Shipyards.

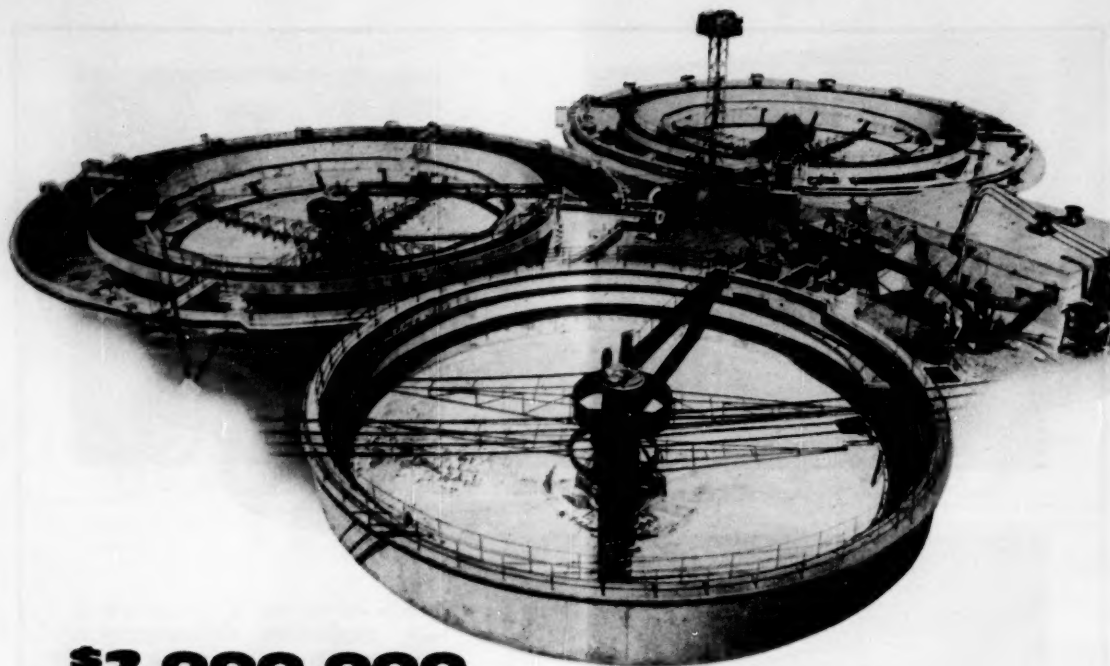
We are prepared to assist you in the location, to estimate costs and build or expand your plant — we have company-owned marine and land equipment to insure meeting commitments promptly.

Efficient supervision will relieve you of worries over details, both of an engineering and construction nature, from the time the plant is conceived until it is placed in operation.

TIDEWATER CONSTRUCTION CORPORATION

ENGINEERS—GENERAL CONTRACTORS

NORFOLK, VIRGINIA



\$2,000,000 MONUMENT TO PROGRESS

Since the end of World War II, West Virginia Pulp and Paper Company has plowed millions of dollars into its plant at Covington, Va., to make it one of the most modern and efficient paper mills in the country.

All of this money has been spent wisely, but little of it has been spent better than \$2,000,000 which the company invested in an operation which will bring it no financial return whatever.

We are referring to the Covington mill's revolutionary waste treatment plant, which is designed to bring about a large scale reduction in the mill wastes being discharged into the Jackson River.

The waste treatment plant (shown above) is an engineering marvel developed by the company in conjunction with the National Council for Stream Improvement and in cooperation with the Virginia State Water Control Board.

After one year and more than 150,000 man-hours of construction work, the plant has started operations. Following a "shake-down" period, the plant is expected to account for improvements in the condition of Jackson River which were considered impossible a few years ago.

According to engineering estimates, the plant can handle up to 24 million gallons of pollution per day, which is 50% greater than the present volume of wastes from the Covington mill.

At peak volumes the treatment plant is expected to remove up to 90% of the harmful solids and organic material from the wastes.

Efficient as it is, the waste treatment plant has its limitations. It won't, for instance, have much effect on the dark color and foam which sometimes mars the appearance of the stream. These conditions — harmless, though sometimes unsightly — are problems which we will tackle as part of our continuing effort to improve the condition of the streams upon which we depend to operate our mills.

West Virginia Pulp and Paper Company
COVINGTON / VIRGINIA



Steelwork for giant Ford plant bolted in 78 working days

The old adage, "now you see it, now you don't," worked in reverse recently at Ford's new assembly plant at Mahwah, N. J. For the steelwork for this huge structure, the largest Ford assembly plant ever constructed, was erected in only 78 working days.

The one-story mill-type structure is 2115 ft long and 790 ft wide, and ranges in height from 25 ft to 31 ft. Its total layout covers an area of 1,800,000 sq ft. Its steel framework, weighing 9600 tons, is bolted with nearly 250,000 Bethlehem bolts, including approximately 150,000 high-strength bolts.

Bethlehem High-Strength Bolts make possible a saving in erection time because they can be installed quickly by a two-man crew. The hexagonal-head bolts are inserted with two hardened washers, one under the head, the other under

the hexagonal nut. Then the nut is tightened to predetermined torque with an air-powered impact wrench, so that it stays tight indefinitely.

Bethlehem High-Strength Bolts are furnished in carbon steel in all sizes from $\frac{1}{2}$ in. to $1\frac{1}{4}$ in., and in varying lengths. They are heat-treated by quenching and tempering, and meet all the requirements of ASTM Specification A-325.

Whether or not you have immediate construction in mind, you'll want to look into the saving in erection time made possible by the use of Bethlehem High-Strength Bolts. The nearest Bethlehem office is at your service.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

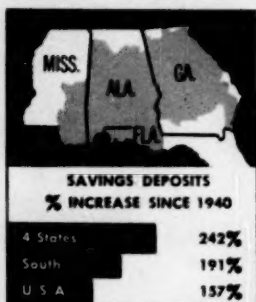
On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation, Export Distributor; Bethlehem Steel Export Corporation

Bethlehem High-Strength Bolts

**BETHLEHEM
STEEL**

Buying Power Goes Up By The Hour In This Area

Shaded section designates area served by the four investor-owned electric power companies in The Southern Company system



Plain figures prove it: savings deposits, which indicate buying power, have been growing more swiftly in the South than in the rest of the nation. And the four states served by The Southern Company show the greatest increase of all!

This rapid growth of buying power in turn means an increasingly attractive market for consumer products and makes this an excellent location for the manufacture, processing and distribution of almost every type of finished goods.

For specific answers to questions relating to this area, write to the Industrial Development Division of any of these companies:

Alabama Power Company
Birmingham, Alabama

Georgia Power Company
Atlanta, Georgia

Gulf Power Company
Pensacola, Florida

Mississippi Power Company
Gulfport, Mississippi

THE SOUTHERN COMPANY

Atlanta • Birmingham



LITTLE GRAINS OF SAND

*"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."*

It Pays. In the monthly bulletin of the Cleveland Trust Company we read: "More money was spent for advertising in 1954 than ever before, and still more will probably be paid out in 1955. Larger advertising budgets are planned by many business firms in anticipation of continued keen competition, and some increase in rates. An estimate by Printers' Ink puts total expenditures for 1955 at \$8,750 million, a rise of about \$500 million over the 1954 total."

James Webb Young, a staunch believer in the value of advertising, proves his case for its value by proving that we all like that which is familiar. He says that we go to foreign countries and grieve because we hear no English.

We greet a fellow-countryman in Paris as though he were a member of the family. The menu in a fancy restaurant offers a dozen exotic dishes, but we order roast beef and mashed potatoes.

So it goes with advertising. Familiar names make us comfortable. The faith of persistent advertisers pays off.

The Farm Issue. The basic trouble with the farmers of the nation is that there are too many people trying to make a living out of agriculture. As in everything else, improved machinery and methods have wrought a revolution in output per worker. It is the old story told again of fewer and fewer people being needed in agriculture to produce the food and fiber for themselves and the rest of the population. Without this shift in occupations this country could never have enjoyed its great industrial development.

Thus, stripped to essentials, the issue comes down to whether to buck this trend by holding the umbrella of high support prices over farmers generally, keeping more people in agriculture than needed and adopting a spread-the-work policy of rationing output regardless of productivity, or whether to recognize and accept this trend by restoring the test of flexible prices which, applied within limits cushioning their impact, should

channel production into fewer and more capable hands. For those who are willing to face the facts, there seems little choice as to which course will, in the long run, prove best for agriculture and for the country.

Return to Respectability. From 1934 until recently the word "conservative" had been a bell to toll the burial of political ambitions. Hurlled by men like Aubrey Williams and Harry Hopkins it was an epithet. It was supposed to be anathema to the people, soon to disappear with the passing of a few old relics in the Senate and the Supreme Court.

Now inquiring reporters scurry about the country and note in wonder "the new conservative trend." Books on the conservative mind are treated with respect, if not always with understanding or admiration, by the critics of the literary journals.

For conservatism is not a policy; nor is it a program to solve economic or political problems. It is hardly more than an instinctive belief that today's society is built on seven thousand years and that in those years men have found things they should fasten to. Out of this grows not opposition to a change in political institutions or in economic methods but an awareness that in too hasty flight from the old we can flee to evils we know not of.

The instinct to conserve never left the American people. It just took time and a few courageous men to give it public habitation and a proud name.

Loss of Liberty. Union members of the United Automobile Workers might be surprised to note that under the Guaranteed Annual Wage plan the union finds itself in the despotic position of forcing its members to work whether they want to or not, for under the plan the laid-off worker will be required to register with the employment service and to accept suitable employment offered him, suitability to be defined by agreement.

(Continued on page 28)

Security can never be guaranteed
but its promise can be won through
personal achievement.

WESTBROOK ELEVATORS

Made in Virginia

ARE DEPENDABLE, EFFICIENT AIDS TO MODERN PRODUCTION

*Many hundreds of Westbrook Freight Elevators
are helping in the manufacture of*



DAN RIVER FABRICS
CANNON TOWELS
FIELDCREST FABRICS
LANE CEDAR CHESTS
CAMELS
LUCKY STRIKES
CROMPTON VELVETS
DREXEL FURNITURE
CELANESE
DUKE POWER

Whether you are planning a new plant, rearrangement of your present plant, or improvements to your present elevators, Westbrook can be of service to you.

WESTBROOK ELEVATOR MFG. CO.
DANVILLE, VIRGINIA

RICHMOND

CHARLOTTE

RALEIGH

HICKORY

SITE SELECTION MADE EASY

Whether you are moving to a new location, establishing a branch plant or beginning an entirely new operation, we can save you valuable time and money in your quest for the "right" spot.

Simply give us an outline of your requirements and from the numerous sites we have catalogued in the Seaboard Southeast, we will furnish you concise and up to the minute reports on locations suited to your individual needs. We have been in this business a long time and we have assisted many of the country's important concerns in their plant location problems.

This service will cost you nothing and your inquiry will be held in strict confidence.

Warren T. White
Assistant Vice President
Seaboard Air Line Railroad Company
Norfolk 10, Virginia

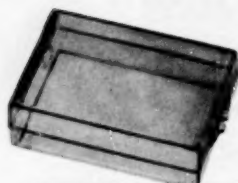


SEABOARD
AIR LINE RAILROAD



THROUGH THE HEART OF THE SOUTH

*Serving the Packaging
Needs of America with
Outstanding Plastic*



Packaging

**HAKE PLASTIC
BOX Corporation**



HAKE PLASTIC BOXES OFFER:

High quality, hinged, plastic boxes of crystal clear transparency. Sparkling display of the packaged product for added sales impact. Protection of the packaged product from dust, dirt and handling. A high re-use value to the consumer. (A constant reminder of the product.)

Hake plastic boxes are available in a wide range of stock sizes, in clear, tinted or opaque, at low cost. All Hake boxes are equipped with our unique patented hinge. Feel free to consult us at any time about your packaging needs.



HAKE Plastic Box Corporation

1215 Midvale Ave., S. W. • ROANOKE, VA. • Phone 3-2456

SALES OFFICES: New York: Empire State Bldg., Rm. 1022, CH 4-8892

Boston: Kirkland 7-0870 Baltimore: MOhawk 4-8506

Cleveland: WYoming 1-2883 In Canada: Plasti-Pak Containers

LTD. Plastic Ave. Toronto 14, Canada. CLifford 9-1166

THE WORLD'S LARGEST MOLDER OF SMALL PLASTIC BOXES

LITTLE GRAINS OF SAND

(Continued from page 25)

This, of course, is in direct violation of the union members' rights as Americans to work when, where, and as they please.

Also, the union members, particularly those who like extra pay, might be surprised to discover that the union is inserting safeguards into the plan to discourage overtime. The one week of guarantee for two of employment, was deliberately selected to avoid any danger that the guarantee might deter hiring of new workers, or lead to excessive overtime for the existing workforce.

Fiscal Dilemma. Federal Reserve authorities can't let the money market tighten itself without squeezing the biggest borrower, the Treasury. And they can't ease the money market for the Treasury without also adding to the dangers of inflation.

By almost any monetary theory—including that of the most extreme Keynesian money managers—when the economy is already barreling along is no time to step on the accelerator; it calls, if anything, for a little checking.

But tighter money is bound to pinch somebody. The exhilaration in the business air is so heady that every political pressure group is ready to complain if things don't keep going faster. And besides political difficulties the money managers also have the huge Government debt bearing down on them.

The trouble, of course, is with the past. Without the past inflation and the past spending that has built up the debt, the present Board would not be in this unhappy situation. Past imprudent use of monetary powers makes it harder to act prudently now.

From Gas to Oil to? The production of natural gas has none of the characteristics of a public utility. It does not enjoy, nor does it seek the monopolistic privileges extended to utilities. It is a highly competitive business which cannot be given public utility status without destruction of the incentive necessary to the discovery and development of new reserves.

About one-third of current natural gas production is obtained from oil wells. If the federal government regulates the sale of gas coming from an oil well it indirectly regulates the production of gas from that well, and thereby in fact also regulates the production of oil which is produced with the gas.

It is at this point that the consequences to all competitive industries become clear. If crude oil and natural gas prices can be regulated then so may the production and price of any commodity, whether it is competitively produced or not.

Letter to Santa Claus from a Small Business Man

Dear Santy, what we want this year
Of Bureaucrat perdition
Is simply that we be relieved
Of Fed'ral competition;
For what's the use of S.B.A.
To help the little feller,

(Continued on page 32)



A Quality Coal for Every Purpose



Prepared to Meet Your Most Exacting Requirements

PRODUCED BY
JEWELL RIDGE COAL CORPORATION, TAZEWELL, VA.

SOLD EXCLUSIVELY BY
JEWELL RIDGE COAL SALES COMPANY, INC.

801 INSURANCE BLDG. Phone 7-7849 RICHMOND 19, VIRGINIA

TAZEWELL

•

CINCINNATI

•

WASHINGTON

•

CHICAGO

MAY NINETEEN FIFTY-FIVE

FOR INDIVIDUALS, BUSINESSES AND TRUSTEES

**We execute orders for the purchase or sale of securities,
analyze lists of holdings and submit recommendations.**

FOR FINANCIAL INSTITUTIONS

**We offer a diversified list of Municipal and Corporation
bonds for investment portfolios.**

FOR CORPORATIONS and MUNICIPALITIES

**We prepare plans for refunding outstanding issues of
bonds, or for raising of new funds.**

*We specialize in buying sound businesses—supply man-
agement and capital, when necessary reorganize.*

SCOTT, HORNER & MASON, Inc.

INVESTMENTS

Established 1932

**RICHMOND
ROANOKE**

**LYNCHBURG
BLUEFIELD, W. VA.**

**NORFOLK
DANVILLE**



What's in it for you?



ONE OF THE KEYS to safer handling of your freight shipments is inside this new Southern Railway freight claim prevention car.

For here is a completely equipped "theater-on-wheels," with a 60-seat auditorium, a projection room for both motion pictures and slides, a radio, record players and tape recorder. Designed to "set up shop" any place along our lines, the unit is completely self-contained, with its own power generator, heating and air conditioning system.

Our yard crews and people who work in freight transfers will share in this new educational program at various points on the Southern. This new weapon in our never-ending fight against freight damage will help give your freight a *safer* ride on the Southern! **SOUTHERN RAILWAY SYSTEM**

If Aladdin Lived in Virginia could he wish for **MORE!**

Shenandoah Life, a Virginia Company, offers the kind of security never believed possible in Aladdin's time. For example, consider these wanted features of modern life insurance: Income that is guaranteed for life; a guarantee to pay your heirs all you had planned to save by retirement age, if you don't live to save it; a guaranteed value for your equity if you have to sell out; favorable tax treatment of income . . . and many others. Think it over!

See
your nearest
Shenandoah Life
Field Underwriter



Shenandoah Life
INSURANCE COMPANY, INC.

Roanoke 10, Virginia

Paul C. Buford, President

LITTLE GRAINS OF SAND

(Continued from page 28)

If ev'ry time we pay our tax
We want to howl and beller?
It's rough enough to have it tough
From private competition,
But ev'rything we try to make
From paint to ammunition
The Bureaucrats are at it too—
A socialist condition!

For Uncle washes windows
And Uncle bakes the bread
And Uncle makes the best ice cream
(At least that's what he said.)

And Uncle makes some oxygen
And furniture and rum,
Wooden boxes by the score
And aluminum,
Magnesium and boats and chain
And spectacles and flags,
Fertilizer, teeth and guns,
Acetylene and bags.

He owns uncounted businesses
From power plants to trucks.
He sunk in them the people's dough
A hundred zillion bucks.

It is a fright to view our plight
All digging just like gophers,
Supporting countless arsenals,
Employing countless loafers.
They take the work away from us
And grind their little axes,
And every time we make a buck
They chop it off for taxes.

For Uncle's hauling oil and coal,
He also drives a bus,
He cleans the rugs and sprays the bugs
And he competes with us.

And Uncle sells "insurance" too,
Although the word's in doubt
Because there isn't any fund
Or contract written out.
But that gives Uncle no concern,
His salesmen never fail,
For we buy Uncle's policy
Or sleep in Uncle's jail!

Now if we let the Bureaucrats
Continue in their ways,
The land will boast from coast to coast
Of naught but T.V.A.'s!
So help us out, dear Santa Claus,
And do not hem and haw,
Give business to the citizens,
Let Uncle practice law.

THE FLY ASH ARRESTOR CORPORATION
R. W. COWARD, Chairman of the Board

What was a mere apple to this legendary marksman whose feats were so widely acclaimed. Hadn't he already rid the people of the terrible bailiff with his cross and bow?



how could **TELL** tell?



Skill and know-how have long been the by-word of confidence and certainty in performance . . . a factual truth that holds today in the office, the factory, the store and in the bank.

Mountain Trust's understanding experience, unshackled vision, plus a network of financial contacts throughout the country have meant great satisfaction to hundreds of businesses in this area—those starting new business ventures or expanding established ones. And what we've done to help others, we can do for you!

MOUNTAIN TRUST BANK

ROANOKE, VIRGINIA

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION • FEDERAL RESERVE SYSTEM

"SOLID AND FRIENDLY AS THE MOUNTAINS OF VIRGINIA"

Facts Favor Virginia



ROOM TO GROW

The profitable operation of any industry is often dependent upon (1) its ability to change its plant collar size without the heavy expense of relocation (2) its easy access to raw materials, equipment and supplies which are the life blood of any business. Virginia's uncrowded 40,815 square mile area, plus its rich bituminous coal fields, its plentiful sources of industrial water, electric power, natural gas, extensive beds of limestone and dolomite, timber, etc. are just some of the many reasons why leading manufacturers are finding room to grow and prosper in this area.

You have specific requirements for your particular type of manufacture. Let us give you specific information about plant sites and/or buildings and facilities for sale or lease which answer your particular needs. *There is no obligation — and the information will be given in strictest confidence.*


There are

10 Major Reasons why you should locate your factory in VIRGINIA

1. Nearness to markets
2. Quality labor force
3. Varied mineral resources
4. Top-grade transportation
5. Excellent water supply
6. Substantial forest resources
7. Abundant power and fuel
8. Excellent climate
9. Friendly, efficient government
10. A good place to live and work

These are only a part of the compelling advantages which make Virginia an ideal state for industry — and a wonderful state in which to make your home and bring up your family.

Facts Favor Virginia



NEAR DOMESTIC AND WORLD MARKETS

Virginia's dispatching system for incoming raw materials and outgoing movement of finished products can be one of the strongest links in the chain of your industry's operation — making it more efficient, more productive and far more profitable. Virginia is strategically located in the center of the magic circle of 60% of America's business, easily reached via one of the finest highway networks in the nation, plus excellent rail and air facilities. And foreign markets are no problem when shipments are made through the famous year 'round ice-free Virginia Ports.

*For full information IN CONFIDENCE,
write, telephone or visit —*

DEPARTMENT OF CONSERVATION AND DEVELOPMENT
Division of Planning and Economic Development
301 State Finance Building, Richmond, Va.
Telephone 3-3449

Sound Financial and Tax Policy

Businesses are attracted to Virginia because of its sound financial foundations. Here is a State whose leaders have long been recognized as exponents of economy in State and National government . . . a State with a pay-as-you-go road building policy, plus fair real estate values and a favorable tax structure. These factors alone can often trim a break-even point for an industrial manufacturer.

Facts Favor Virginia



WILLING WORKERS

An improved end product—a lower manufacturing cost—or a reduced plant maintenance cost can often be attributed to the type and dependability of a company's employees. Virginia's technical growth and progress is keeping talented youth and skilled workers by providing challenging high level employment within the home area. These people are native born, home-rooted and are dependable, loyal workers for your plant when it becomes a part of their community.

You have specific requirements for your particular type of manufacture. Let us give you specific information about plant sites and/or buildings and facilities for sale or lease which answer your particular needs. *There is no obligation — and the information will be given in strictest confidence.*

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These are only a part of the compelling advantages which make Virginia an ideal state for industry — and a wonderful state in which to make your home and bring up your family.

Facts Favor Virginia



A PLACE TO PLAY, TOO!

Virginia, one of America's most beautiful vacationlands, is an after-hour playland for Virginia workers. Every outdoor sporting desire from the sun-splashed shores of the Atlantic, across to thrilling highways in the sky following the crest of the storied Blue Ridge Mountains. Ocean, bay and inlet fishing at its best — famous golf courses — fantastic natural wonders — all in a setting of unsurpassed scenic beauty and the romance of hundreds of historic cities, towns and shrines.

*For full information IN CONFIDENCE,
write, telephone or visit —*

DEPARTMENT OF CONSERVATION AND DEVELOPMENT
Division of Planning and Economic Development
301 State Finance Building, Richmond, Va.
Telephone 3-3449

HOSPITALITY...

Virginia is a land of gracious hospitality . . . a land of clean, progressive communities where people take pride in their homes, their gardens, their churches, and their schools. It's a friendly land ready to bid you welcome, ready to give you a helping hand and greet you with a genuine warmth in the spirit of the Old South in the days of Washington, Jefferson and Lee.



To make farming a better-paying business . . .

THREE YEARS before the Spaniards sank the battleship Maine in Havana harbor, the first V-C Fertilizers were supplied to American farms by a group of small manufacturers who had gotten together and formed a company based on a new idea in the production and distribution of commercial plant food.

For economy and convenience, V-C factories were to be located near the farms they served, and yet each factory was to benefit from the scientific research, skill, experience and facilities of a large organization.

In 1895, the V-C aim was to make farming a better-paying business, by supplying farmers with better fertilizers at reasonable prices through reliable, dependable dealers. V-C could prosper only if the farmers prospered.

Through the years, V-C has constantly tested and developed new methods and new materials to

bring more and more profit-making crop-producing power to the farms of increasing thousands of V-C customers. And the price of V-C Fertilizers has remained low compared to other things the farmer buys.

Yet, fertilizer is only part of the story of V-C's partnership with the farmer and the soil. V-C has constantly striven to develop new markets for farm products. V-C uses cotton cloth and kraft paper from farm pulpwood to make millions of bags each year. V-C research has created a new textile fiber from corn, known as *Vicara*®, now found in luxurious apparel for the whole family at fine stores everywhere. V-C uses other farm products in countless ways.

In the years ahead, Virginia-Carolina Chemical Corporation will continue to rally every resource to the job of making farming a better-paying business.

1895 • VIRGINIA-CAROLINA CHEMICAL CORPORATION • 1955



Support

for an expanding
economy

In the vigorous economic growth of the Old Dominion, the firm of J. C. Wheat & Co. stands experienced and qualified in its function of securing capital for corporate expansion, to the mutual benefit of investor and corporation.

When new product acceptance, aggressive management policies, or the advent of merger dictates the expansion of your present business, our experienced staff will be pleased to acquaint you with the many investment services we provide.

*Our services are available
to all investors!*

J. C. Wheat & Co.

MEMBERS NEW YORK STOCK EXCHANGE

920 East Main Street • Richmond, Va.

Investment Securities

NATURAL RESOURCES

LIMESTONE
GLASS SAND
TIMBER
WATER

TRANSPORTATION

RAILROADS
HIGHWAYS

AMPLE ELECTRICITY

**READY TO SERVE YOU
REGARDLESS OF YOUR SIZE**

NORTHERN VIRGINIA POWER COMPANY

**AVAILABLE SITES
AND BUILDINGS**

LABOR SUPPLY

**SOME MAJOR
INDUSTRIES
IN THIS AREA:**

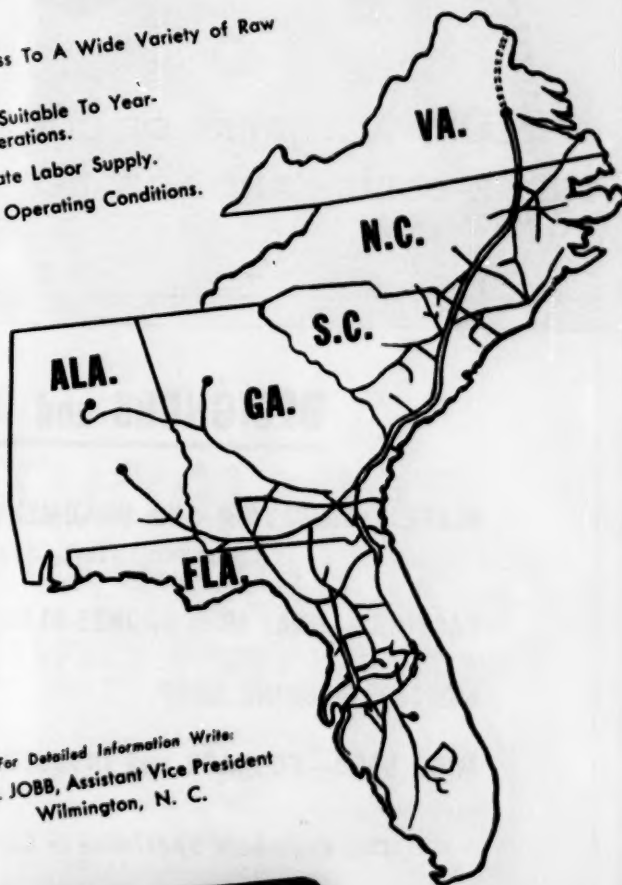
PLASTICS—CHEMICALS
WOOD PRODUCTS
FABRICATED METALS
FRUIT PRODUCTS
TEXTILES
RUBBER PRODUCTS

Whether yours is a big operation or a little one, a plant location "tailored" to your specific needs means greater efficiencies, larger savings and more profits. Whether you employ ten people or 10,000, we can help you find such a "tailored" location. Our staff of technical and area development specialists are at your service at no charge. For further information concerning this confidential service, write: Area Development Dept., Northern Virginia Power Co., Winchester, Va.

THE CONTINUED GROWTH of the Southeast

Is Proof of the Many Advantages
This Area Offers

- Ready Access To A Wide Variety of Raw Materials.
- A Climate Suitable To Year-Round Operations.
- An Adequate Labor Supply.
- Favorable Operating Conditions.



For Detailed Information Write:
R. P. JOBB, Assistant Vice President
Wilmington, N. C.

VIRGINIA

NORTH CAROLINA

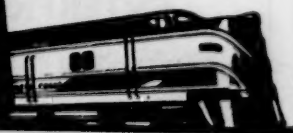
SOUTH CAROLINA

GEORGIA

FLORIDA and

ALABAMA

ATLANTIC
COAST LINE
RAILROAD



BLACK DIAMOND TRAILER CO., INC.

BRISTOL, VIRGINIA



**MANUFACTURERS OF COMMERCIAL TRAILERS,
TRUCK BODIES AND LOW-BED MACHINERY TRAILERS**

DESIGNERS and BUILDERS

PLATE FABRICATION AND WELDMENTS —

CARBON STEEL—STAINLESS—ALUMINUM

CASTINGS—GRAY IRON—BRONZE—ALUMINUM—PERMANENT MOLD

MODERN MACHINE SHOP

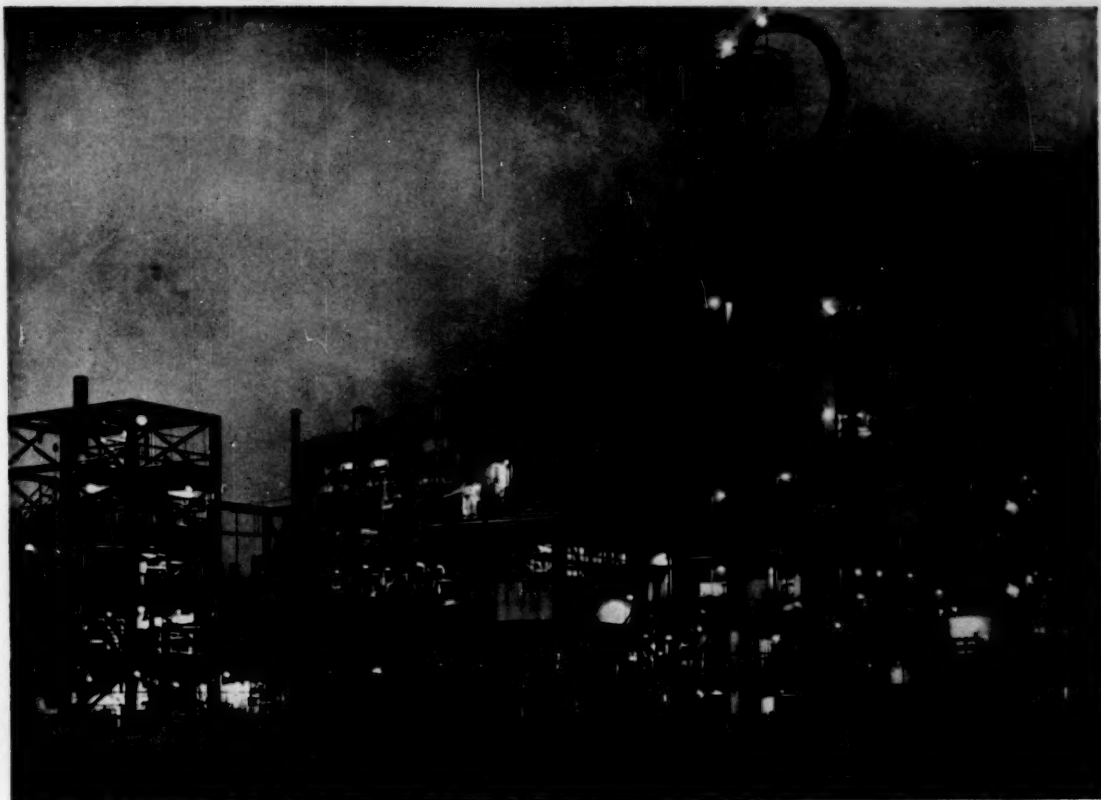
MINE CARS—FURNACE and INDUSTRIAL CARS

Our Engineers Specialize in Solving your Problems

ENTERPRISE WHEEL and CAR CORPORATION

BRISTOL, VA.

HUNTINGTON, W. VA.



NATURAL GAS and INDUSTRY Are Working Partners !

As a fuel—as a product ingredient—as a processing tool, Natural Gas can be an important factor in your production. Because of the abundance and favorable cost of this resource, the James River Valley of Virginia becomes the natural location for those who seek maximum production, uniform quality and operating economy. Write or phone the Industrial Engineer, Commonwealth Natural Gas Corporation, for any additional information you might desire.

Commonwealth Natural GAS Corporation

116 South Third Street, Richmond, Virginia

Appalachian has 6 Virginia offices AT YOUR SERVICE for good plant location

Appalachian has specially trained men in 6 major offices in Virginia who are at your service to help you find plant sites or existing facilities meeting your specific requirements.

They maintain complete and up-to-date files of information you will need to select an ideal location for your type of manufacturing. They can save you many hours of time in investigation and analysis. There's no charge for their service, and your inquiry will be kept confidential.

If you want dependable plant site information, here's a specialized service that's yours for the asking.



Write or Telephone

DORMAN M. MILLER, *Industrial Agent*
APPALACHIAN ELECTRIC POWER COMPANY
ROANOKE, VIRGINIA

Appalachian Electric Power Company
AMERICAN GAS AND ELECTRIC SYSTEM

Serving American Homeowners with...

QUALITY PRODUCTS



The new LIF-T-LOX R.O.W. window is beautifully balanced and free of attachments to the sash. The sash lifts out entirely, and can be raised or lowered by easy finger pressure. No tapes to unhook, nothing to adjust!



VENT-A-WALLS save precious construction time because they are so easy to install, and reduce breakage. The sash are easily removed to protect glass during construction and facilitate painting.



You'll love the absolute convenience of R.O.W. HIGH-LITES too, for they like all other R.O.W. removable windows, lift out from the inside for washing, painting or glazing.

Our modern window assembly plant located in Rocky Mount, Virginia serves builders and homeowners in the following states: Virginia, West Virginia, North Carolina, South Carolina, Georgia, Alabama, Eastern Tennessee, Delaware, Maryland, Eastern Pennsylvania, Southern New Jersey and the District of Columbia. In addition to LIF-T-LOX, VENT-A-WALLS and R.O.W. Sliding Windows our products include a wide range of quality building materials and supplies.

Our modern millwork plant located at Reno, Nevada, near the western pine belt, is a constant source of quality materials and millwork.

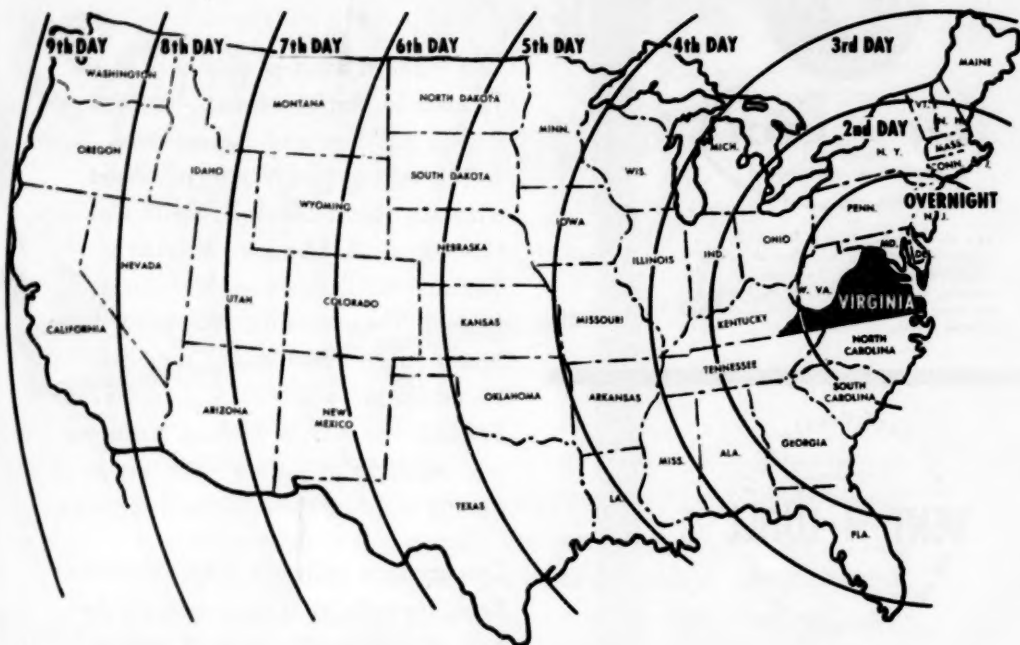


R.O.W. DISTRIBUTORS

Rocky Mount, Virginia

MANUFACTURERS OF MILLWORK ■ DISTRIBUTORS OF BUILDERS SUPPLIES

YOU MAKE IT... WE'LL TAKE IT!



Approximate Delivery Time from Virginia to Various Areas of the United States

Motor trucks fan out from Virginia . . . to inland cities and seaports . . . to processing and distribution points . . . to consumers, everywhere.

Trucks perform a personalized service for Virginia's industrial and social life. They tailor their services to the needs at hand. They go busily about their tasks, creating confidence through convenient, dependable, prompt and economical service. Trucks are helping Virginia grow and are contributing to higher standards of living.

Criss-crossing Virginia, serving every town and hamlet, are 175 motor freight lines, 54 of them domiciled in the state, that are at your service to pick up shipments for any points you want them to go. Generally, points within a 300-mile radius mean simple over-night delivery.

Yes . . . come to Virginia, and make it or grow it. Motor trucks are at your constant service to carry it to the world . . . quickly . . . economically . . . satisfactorily.



Representing the
Old Dominion Trucking Industry

VIRGINIA HIGHWAY USERS ASSOCIATION
JEFFERSON HOTEL RICHMOND VIRGINIA

Dial Richmond 7-0755

Southwest's TALLEST Building by AMERICAN BRIDGE

Republic National Bank
Building, Dallas, Texas

Architects: Harrison & Abramovitz; Gill & Harrell

Structural Engineers: Edwards & Hjorth

Structural Steel Fabrication and
Erection: American Bridge

DEEP IN THE HEART OF TEXAS, looming high and handsome above an imposing skyline, the new 36-story home of the Republic National Bank of Dallas is the Southwest's tallest building.

Covering more than an acre of land in the center of the thriving metropolis, this \$25,000,000 building stands as another everlasting example of the strength and versatility of steel construction. 14,000 tons of structural steel went into its gigantic riveted frame—all of which was fabricated and erected by AMERICAN BRIDGE.

One of the interesting applications of the steel frame construction is the use of huge trusses in the bank wing's top story from which the floors above the main banking room are suspended, thus freeing the expansive, two-story main banking room of interior columns.

Your architect or consulting engineer can be relied upon to specify the type of construction best suited to your project. And AMERICAN BRIDGE has the experience, the equipment and technically skilled personnel to handle all types of steel construction with economy and dispatch — any time, anywhere. Our nearest office welcomes an opportunity to figure on your next job.

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION
GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

Contracting Offices in: AMBRIDGE • ATLANTA • BALTIMORE • BIRMINGHAM • BOSTON • CHICAGO • CINCINNATI • CLEVELAND
DALLAS • DENVER • DETROIT • ELMIRA • GARY • MEMPHIS • MINNEAPOLIS • NEW YORK • PHILADELPHIA • PITTSBURGH
PORTLAND, ORE. • ROANOKE • ST. LOUIS • SAN FRANCISCO • TRENTON • UNITED STATES STEEL EXPORT COMPANY, NEW YORK

AMERICAN BRIDGE



UNITED STATES STEEL

Capital for expansion



Expansion ... relocation ... new plant ... new equipment. These are key words in American industry today ... words which generally imply the need for additional capital.

For more than a quarter of a century, we have been privileged to aid many of America's leading industrial corporations, utilities, railroads and others obtain needed capital.

We would welcome the opportunity to discuss with you your corporate financing requirements.

Your attention is invited.

MASON-HAGAN
INC.
INVESTMENTS
1110 E. MAIN STREET
RICHMOND 10, VA.

In recent months, we have been a participating underwriter in financing for the following corporations:

ATLANTIC REFINING CO.
CAMPBELL SOUP CO.
CONTINENTAL OIL CO.
CORNING GLASS CO.
EL PASO NATURAL GAS CO.
GENERAL MOTORS CORP.

MILLER & RHODES, INC.
PACIFIC TELEPHONE & TELEGRAPH
TENNESSEE GAS TRANSMISSION
UNION OIL CO. OF CALIFORNIA
VISC. ELECTRIC & POWER CO.
WACO PRODUCTS CO.





SQUEEZE AHEAD

of competition

Choose a location
between the
Capital
of the Nation
and the Capital
of the Old
Dominion



If you're thinking about a new location for a distribution warehouse or a light manufacturing operation, why not select a spot in an area where you won't get caught off base by shortages of markets, materials, or manpower?

The area between the Capital of the Nation and the Capital of the Old Dominion offers locations in relation to consumer markets, natural resources, and labor supply that are of first importance in these increasingly competitive times.

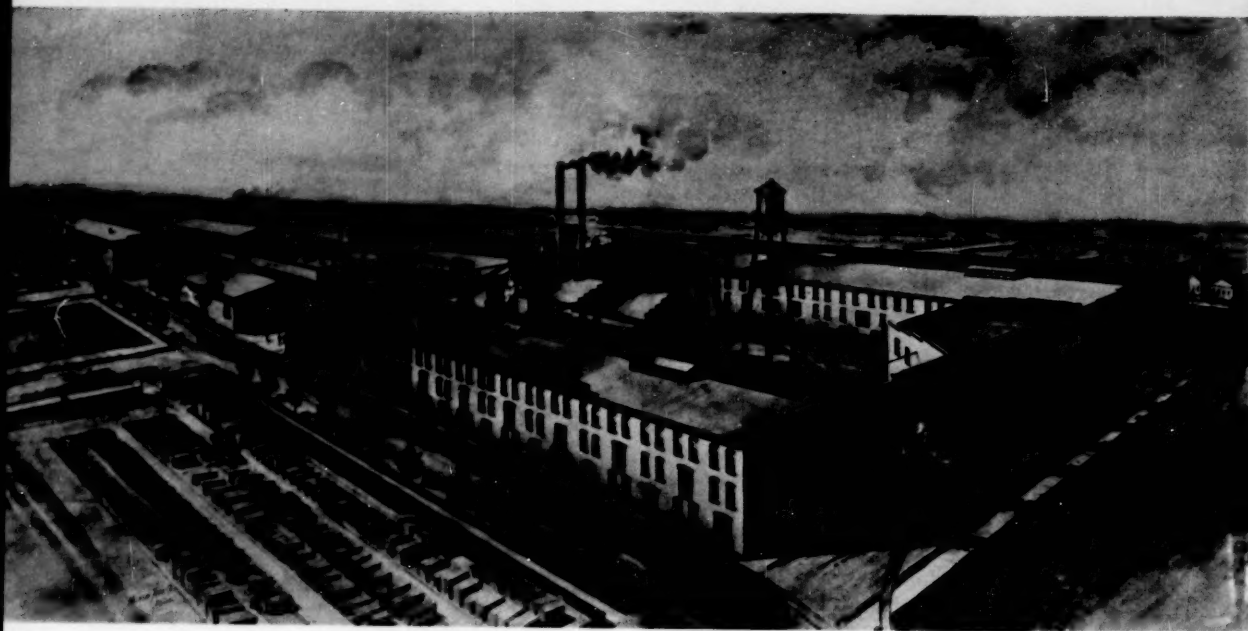
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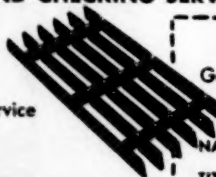


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CITY AND STATE



"What Enriches the South Enriches the Nation"

A Call For Statesmanship

A Guest Editorial By W. Alton Jones

Chairman of the Board, Cities Service Company

There are more than 24,000,000 natural gas consumers in the United States. There are thousands of industries which use natural gas either as a fuel or as the source of ingredients for the products they make. For these millions of home users and thousands of industries, it is essential that we find and produce the gas they need.

It is also vital that we find and produce this gas from the standpoint of national defense.

With the national well-being at stake, it is important that the public understand the danger of any action which could deprive us of assured supplies of natural gas. That danger exists, clearly and strongly, in federal control of natural gas production.

Those who advocate federal control of production say it is necessary to protect the consumer. Actually, on a national basis, 90 per cent of the cost of natural gas to the consumer represents the expense of delivering it from the source of supply to the burner tip . . . a service already regulated by various governmental agencies, federal, state and local.

Nobody has objected to this control of 90 per cent of the natural gas business. It is accepted that regulation of rates is necessary where any monopoly exists in providing public service, whether it be natural gas, power and light, street railway, or telephone and telegraph. No such monopoly exists in natural gas production. It is one of the most highly competitive industries in the nation today, and the price of its product should

continue to be determined by this competition—not by rigid government control.

If it is logical to apply Federal price controls to natural gas production, it would be equally logical for the Federal government to fix the prices of iron, zinc, lead, copper, corn, or any other product. Thus applied, it would be destructive of the rights of the states and the individual. It would amount, in final effect, to nationalization, to confiscation of property.

These are ultimate dangers. The immediate danger, in the case of natural gas, is that Federal control will discourage the search for and the production of a vital source of energy, and in time leave us without supplies adequate to meet the public demand and to serve the needs of national defense. Natural gas production is risky business, and who will take that risk if, when a successful well is drilled, its operation may be subjected to changing and capricious restrictions of a Federal Board?

It is to be hoped that the Congress of the United States will act promptly and positively to reverse this un-American trend and so return natural gas production to private enterprise, under state conservation regulations. The nation's future supply of an essential source of heat and energy will in that way be assured for many years to come, the needs of national defense will be met, and both the national economy and the natural gas consumer will be better served.

Stock Quotations Continue Rise Despite Tighter Credit Controls

Washington money managers have raised Federal Reserve rediscount rate once and margin requirements twice.

By Robert S. Byfield

Financial Editor

THE performance of the speculative security markets continues to amaze most investors and those who are responsible for advising them. At this writing the Dow-Jones Averages have been reaching new highs almost daily with respect to all the principal groups of issues. The following are the questions most frequently asked. When will the great bull market be over? How high will stocks go before they reach a ceiling? And, finally, when the turn does come will there be a gradual fading away of the upward surge or will there be a more violent reaction where tens of thousands of investors rush in to liquidate at least a portion of their holdings?

Senator Fulbright, Chairman of the Senate Banking Committee, in a speech on April 18, 1955, before the Economic Club of New York, again voiced alarm at what he called "speculative fever" in the stock market. Nevertheless, he admitted exactly what Mr. Bernard M. Baruch had pointed out in his testimony before the Senate hearings in March, that he cannot know whether "the price of a stock is too high as long as buyers are willing to pay for it."

Fortunately, there is no Iron Curtain around the stock ticker, nor are quotations given to the public by means of a press release. It continues to report exactly what has happened; namely, the operations of the greatest of all free markets. The most powerful impact is provided not only by bloodless statistics and abstract economic facts but even more by the interplay of human emotions. There is no altimeter by which the height of the market may be read. Therefore, it is not possible to know whether the present level is too high.

The ascent from the preceding valley has been steep and almost unbroken but perhaps that valley itself was too deep and too wide. We have long suspected

that the excessive gloom and over-discounting of bad news during the period 1946-1950 was unwarranted. The renewed inflation which came with Korea brought the end of a stalemate. Furthermore, the 1952 elections released new economic, social and political forces and resulted in much new legislation having a direct bearing upon the investment climate in the United States.

In this column we have previously referred to the principal causes of the substantial rise in quotations for common stocks and we repeat four of them here:

- (1) Growth in our economy and its productivity.
- (2) Returning confidence on the part of businessmen and investors.
- (3) The cumulative effects of inflation.
- (4) The brake on selling stocks caused by the Capital Gains Tax.

To attempt to fix a ceiling for the stock market would be a quantitative calculation. It would be totally unwarranted since the four principal reasons mentioned above are themselves not measurable on a quantitative basis.

The overall speculative position, entirely aside from these basic facts, has been obscured by other occurrences. Considerable speculative froth has naturally developed with respect to shares of certain companies, the activities and prospects of which have fired the public imagination. The American temperament has generally been one of extremes, and considerable over-enthusiasm has become particularly noticeable in the fields of uranium, nuclear energy, electronics, automation and aircraft manufacturers. Another instance might be the performance of the shares of a number of drug manufacturers which advanced rapidly on the announcement of the Salk polio vaccine to a point where they had vastly exaggerated the earnings potentially deriving from this new discovery.

In addition to shares of the character mentioned, there has also been some highly excitable speculation in instances where mergers, take-overs or stock splits were rumored or announced. Occurrences of this kind provide attractive material for newspaper headlines and commentators over the TV and radio networks because they are extraordinary and frequently sensational. The performance of most stocks seems to have been warranted by such normal criteria involving business outlook, management skill, product innovation, earnings and dividends.

Nevertheless, the United States is passing through a period of fantastic technological development which many observers believe is a kind of second industrial revolution. We have had new industries affect the American scene at various times in the past but nothing which seems to compare with the immediate outlook today.

As reflected in stock market quotations for years on end, even we who have believed in the competitive free enterprise system and risked our savings in it had developed a kind of inferiority complex, having been partially brain-washed by the superior propagandistic skill of overseas Marxists and our own domestic mixed breed of Leftists. And so we were surprised by the healthy current performance of capitalism and its ability to continue to raise our standard of living. Technical development can be seen and understood by millions such as, for example, the synthetic rubber plant in Louisville, Kentucky, where 2,000 men can produce as much rubber annually on a 40-hour week as 80,000 Malaysians working from dawn to dusk in the steaming jungles of Indonesia.

The raising of the Federal Reserve rediscount rate from 1½% to 1¾% last month was an event of high importance. It was practically unnoticed by the stock market and shortly thereafter the Dow-Jones Averages moved into new high ground. Had the announcement been made under other conditions, action of this character by the money managers in Washington might have brought a setback in the securities markets, but the forward momentum of quotations was too great and hardly a ripple was caused.

We have now had our third warning, the first having been the rise in margin requirements from 50% to 60% established early in January; the second being the action of the Federal Reserve System and the third being the further rise in margin requirements from 60% to 70% set late in April. There are reasons to feel that the Federal Reserve System will rely more heavily upon the rediscount rate as an instrument of control than it has previously. We do not know how far the Administration will proceed in the direction of braking speculation and over-extension of credit. However, it has many other weapons in its armory and warnings of this character must not go unheeded. The obvious response should be a heightened degree of caution no matter how tempting an opposite course of action might be.

Cement Industry Planning Big Southern Expansion

The steady growth in the demand for cement and the continuing future growth foreseen, brought about the decision for expansion of facilities.

By Sidney Fish

Industrial Analyst

RECORD-BREAKING activity in the construction industry has stimulated large expansion programs in the cement industry during recent years. With construction likely to continue at a very high level over the next few years, and with highway construction particularly slated for larger expenditures, the cement industry is undertaking further large-scale expansion, so that it will be able to keep up with the demand.

The cement industry has won an enviable position in recent years as a growth industry. Not only has construction been steadily rising, but new uses for cement are being found. Owing to the relatively small increase in cement prices, compared with other construction methods since 1940, cement has been able to more than hold its own against competing materials. New types of cement have also expanded the market for this material.

The South has been able to win a very substantial share of the cement industry's new investments in plants. The industry has been steadily decentralizing, and has been placing new plants in the South where raw materials are available, and where uses for cement are likely to be increasing rapidly during the next decade, owing to the growth of Southern industry, and the construction of homes, roads, schools and other public buildings. Farm uses for cement, too, are expanding rapidly in the South.

During 1954, the cement industry began to get set for what may well be its biggest investment program. This year may see more new capacity added than in any former year. At least 28 major plant expansions will be started, including several new plants. Over the next ten years, capacity of the industry may be expanded at least 20 or 25 per cent. This would entail adding at least 60 million barrels a year to existing capacity of about 293 million barrels. As much as \$400 million may be invested in new cement plants. Nearly half of that program is already mapped.

Since 1948, cement capacity has risen from about 254 million barrels to 293 million in 1954, a gain of nearly 15 per cent.

Owing to the rise in freight costs, which have doubled in the last ten years, cement producers have been trying to install new capacity on a decentralized basis, so that long shipments will be eliminated. While most shipments today are on the basis of f.o.b. mill, increased competition at

the conclusion of the present expansion program may make it necessary for producers more frequently to absorb freight charges. Under such conditions, it is advisable to have plants located so that freight charges will be left at a minimum.

One of the encouraging developments of recent years has been the trend toward new cement producing locations in the South. Florida, Texas, Alabama and other states have been selected for installation of entirely new capacity, and other Southern plants have been modernized and enlarged.

Here are some of the most important plant expansions in the South: Last year, the Southern Cement Company, at Roberta, La., built a completely new plant with capacity of 1 million barrels a year. This plant will be enlarged substantially in the next year or two.

Alpha Portland Cement, a major producer, completed improvements to its Birmingham, Ala., plant which added 20 per cent to its capacity.

General Portland Cement Company completed the second expansion of the plant of its Florida Portland Cement Division at Tampa. Since 1949, capacity of this plant has been increased from 1.5 million barrels to 4 million barrels. At Houston, the Trinity Cement Division of General has just brought into production 1.25 million barrels of additional capacity. And at Dallas, the same division is expanding capacity by a similar amount, to be completed by this July. In addition, a new kiln is being added at Chattanooga.

Halliburton Portland Cement Company built a new plant at Corpus Christi several years ago, and is adding two new plants in Arizona.

Ideal Cement is adding storage and other facilities at its plants in Mobile, Baton Rouge, New Orleans and Houston, Tex.

Lehigh Portland Cement has a program under way at Bunnell, Fla., which will run into the millions of dollars. At this location Lehigh invested \$15 million in brand new capacity of over 1.4 million barrels in 1952. Now this plant's capacity is being increased by 80 per cent. In addition, Lehigh is adding substantially to its capacity at Union Bridge, Md., through a \$15 million program.

Lone Star Cement has substantially increased its capacity in Texas during recent years. In addition, the company last year added new equipment at its New

Orleans and Dallas plants. Altogether, with its current \$14.2 million program, Lone Star will have invested over \$85 million in new plants and equipment since the end of World War II, much of it in the South.

Marquette Cement, which took over the Southern Portland Cement Co. at Rockmart, Ga., last year, has announced a program which will increase capacity at this point through adding a new kiln and other equipment.

The program here will cost \$1.3 million. At Cowan, Tenn., Marquette is spending another \$1.3 million for expansion and modernization.

Penn-Dixie Cement has extensively expanded its Southern plants in recent years. Last year, a 210,000-barrel cement storage plant was completed at the Kingsport facilities.

Behind this record-breaking expansion in cement is the consistent performance of the construction industry in setting new marks year after year. Last year's total investments in construction were estimated at \$37 billion, not counting \$15 billion spent for maintenance and repair.

In setting a new record last year, construction confounded many experts, who had predicted a decline. Actually, the 1954 total was 5 per cent above the 1953 record of \$35.3 billion.

Among the factors in last year's surprising showing were the continuing high spending for schools, roads and other public works. Public schools costing over \$2 billion were built; sewerage and water facilities totaling \$975 million were added, and highway construction set a new peak of nearly \$4 billion, under the stimulus of Federal aid programs and new toll roads. Public utilities, continuing their rapid expansion, spent \$4 billion.

But public spending accounted for far less than half of the year's total. New private construction totaled \$25.5 billion.

This year, private construction is expected to increase to at least \$27.8 billion or \$28 billion. At the beginning of the year, it appeared that industrial construction might be a little lower, but in recent months, confidence in the business outlook has encouraged plans for increased investments. Residential construction this year should come close to \$15 billion, with over 1,300,000 housing units to be started.

The highway construction picture is one of the brightest spots for the cement industry, despite the unexpected opposition which President Eisenhower's \$50 billion Federal ten-year program has run into from Senators who object to the method of financing proposed in the report of the Clay Commission. A step-up in Federal spending for roads is inevitable. It is calculated that, even if Federal spending including funds derived from gasoline taxes, were to amount to the total proposed by the Clay Commission, that the condition of the highways in respect to their ability to carry the volume of traffic indicated for 1965 would be no better than the roads of today are able to carry their burden. And we know that our roads have become quite inadequate as a result of the greater use made of

(Continued on page 124)

Business Wary of Taxes

Growing Trend Toward Income Levies Is Disturbing

By Caldwell R. Walker
Editor, Business Trends

TAX rates are a matter of prime importance to Business.

Like other elements of cost they are accepted as unavoidable when reasonable but shunned or gravely protested when excessive.

In times of plant site quest the tax rates of likely locations are given careful scrutiny and in some instances may be the chief factor in selection or rejection.

Taxes Vary In Type

From the standpoint of Business, taxes may be said to be of three general types: those applying to income; those applying to sales; and those of a miscellaneous nature.

In the latter group such taxes as those applying to property, licenses and charges for services, special assessments, etc.

This group also is the one less likely to incur misgiving or indignation, although unfair or unreasonable charges in any group of taxes can easily have an adverse effect.

Of the three general types, Income taxes can more easily become obnoxious than either of the others. This by reason of the fact that they apply to all types of business and seem to those at the helm of enterprise to strike directly at the heart of effort and ingenuity.

Another reason that Income taxes receive considerably greater protest than other types lies in the fact that they are relatively young as compared with some types which have endured down through the ages and have come to be somewhat inherent in bodies politic.

Especially in the realm of State and Local taxes are those applied against Income of relatively recent origin. Need-

State & Local Taxes—1954

State	% of Total Revenue		
	Con- sumer Taxes	In- come Taxes	All Other Taxes
Me.	36	0	64
N. H.	19	2	79
Vt.	30	10	60
Mass.	16	12	72
R. I.	46	8	46
Conn.	34	8	58
NE	24	9	67
N. Y.	27	19	54
N. J.	21	0	79
Pa.	25	10	65
MA	25	14	61
Ohio	41	0	59
Ind.	42	0	58
Ill.	37	0	63
Mich.	42	0	58
Wisc.	13	21	66
ENC	37	3	60
Minn.	20	14	66
Ia.	29	6	65
Mo.	38	6	56
N. D.	33	4	63
S. D.	33	0	67
Neb.	23	0	77
Kan.	32	5	63
WNC	29	7	64

The Tax Dollar—Where It Comes From



ALABAMA



ARKANSAS



FLORIDA



GEORGIA



KENTUCKY



LOUISIANA



MARYLAND



MISSISSIPPI



MISSOURI



NORTH CAROLINA



OKLAHOMA



SOUTH CAROLINA

Del.	22	21	57
Md.	34	13	53
D. C.	36	9	55
Va.	29	19	52
W. Va.	64	0	36
N. C.	41	19	40
S. C.	54	13	33
Ga.	56	8	36
Fla.	50	0	50
SA	45	11	44
Ky.	34	12	54
Tenn.	49	7	44
Ala.	56	7	37
Miss.	48	9	43
ESC	47	9	44
Ark.	51	8	41
La.	49	4	47
Okl.	42	6	52
Tex.	26	0	74

WSC	36	3	61
Mont.	24	8	68
Ida.	22	10	68
Wyo.	38	0	62
Colo.	34	9	57
N. M.	57	3	40
Ariz.	41	8	51
Utah	35	10	55
Nev.	30	0	70
Moun.	36	7	57
Wash.	61	0	39
Ore.	16	24	60
Calif.	37	10	53
Pac.	39	10	51
U. S.	34	8	58
*South	42	7	51

*—16 Blue Book states

less to say, the reason they were not utilized earlier is because they were not constitutionally legal until after passage of the XVI Amendment.

However, their adoption by various states as a major source of revenue has recently proceeded at swift rate, and today 34 of the 48 states now collect Income taxes of one sort or another.

Sales taxes fall somewhere between the extremes of Income taxes on one hand and traditional Miscellaneous taxes on the other.

Producers and Processors such as Manufacturers and Builders do not complain as loudly over this type of tax as over those levied on Income, even though a

(Continued on page 114)



TENNESSEE



TEXAS



VIRGINIA



WEST VIRGINIA



NEW ENGLAND



MIDDLE ATLANTIC



EAST NORTH CENTRAL



WEST NORTH CENTRAL



SOUTH ATLANTIC



EAST SOUTH CENTRAL



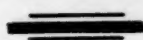
WEST SOUTH CENTRAL



MOUNTAIN



PACIFIC



SOUTH



UNITED STATES

West Virginia Holds 2nd Annual Industrial Development Meeting

Report given by Governor Marland on Arthur D. Little report.

Last month at Morgantown on the campus of the West Virginia University the Second Annual Industrial Development Conference was held. Mr. Andrew V. Ruckman, Executive Director of the West Virginia Industrial and Publicity Commission gave an interesting progress report, excerpts of which will follow. At the same meeting Governor William C. Marland delivered a speech and included some of the findings of Arthur D. Little, Inc., a private industrial research firm which made a study of the industrial development problems. This report will be completely released in June of this year, but some of the results as outlined by the Governor will be mentioned in this article.

Mr. Ruckman reported that West Virginia's youngest child, the Industrial Development Conference, in the past year took its first cautious step. And careful as it was, this first State-wide coordinated movement placed the Mountain State firmly in the industrial development competition throughout the U.S.

"This past year cannot be measured as a unit of time, but rather by what has happened or has been accomplished since the first meeting in Morgantown. Foremost among these accomplishments has been the foundation of a firm and realistically coordinated industrial campaign for the present and future," Mr. Ruckman stated.

"The era of deception has ended for West Virginia," he went on, "for it is now in industrial competition with 47 other states; all of which are offering abundant power, the world's best labor force, excellent industrial sites and well integrated transportation systems. All are the center for something or other. Complacency can no longer be a part of the planning.

"The industrial recovery and progress has started and must be continued," he went on, "if to reach the stature which the State and its people need. During the past 14 months at least 15 new industries have been established within the State. A partial list includes Mobay Chemical, National Aniline, Rubber Fabrication, Inc. at Grantsville, Linde Air Products, Kaiser Aluminum, Foraminco, Inc. at Kenova, Lincoln Brassiere at Hamlin and du Pont at Martinsburg."

He stated that the coal mining industry is showing signs of recovery, but all of this is not enough. More is needed to effectively combat the problems of mine

mechanization and seasonal agricultural employment.

Governor Marland in a speech said in part:

"This Conference is composed of leaders from many communities in West Virginia. It is at the community level that the seeds of industrial development can be nurtured. Without community interest there is no future for industrial development in the State. While it is true that the State spends considerable money in enticing industries to locate within its borders, all authorities agree that it is on the community level that industry is either sold or driven away. When I say the word 'sold' I say it in the literal sense and to be sold, industry must be approached largely in the same way as the housewife who is a prospective purchaser of a Fuller brush. What does the community have to offer industry? It was this question that motivated your State Government to enlist the support of competent counsel. It is hoped that the answers found in their report will be but a foundation for increased and intensified community effort to 'sell' industry.

"At last year's Conference, you recall I announced that we had employed Arthur D. Little, Inc., of Cambridge, Massachusetts, to study and report on industrial development in West Virginia. Specifically, they were to review the technical and economic factors influencing industrial development in West Virginia, determine the industries which appear to be most favorably situated for introduction and expansion, and make specific recommendations on factors influencing the industrial climate of the State.

"This year we are able to discuss the findings of the Arthur D. Little report and to present an outline of their findings, conclusions, and recommendations. . . .

"Let me turn now to some of the major conclusions of the Arthur D. Little report," the Governor continued.

"What the State needs most in the years ahead is industrial diversification so that we will not be so completely dependent upon the fortunes or misfortunes of coal. If we are unable to develop a program that will attract new industries to the State, then we will not have an economy that West Virginians deserve.

"What then are the main problems in attracting new industries to West Virginia? Without burdening you with de-

tail, let me discuss those which would seem to merit some emphasis.

"The first and most important factor in the location of industry that claimed the attention of our experts and researchers is the so called 'labor climate'. The Arthur D. Little staff has given our 'labor climate' a fresh examination to which I would invite your attention. . . .

"There are such factors as the adequacy of the labor supply, its intelligence, skills, and adaptability. On this score, the picture in West Virginia is exceedingly favorable insofar as existing and potential employers are concerned. We have an ample supply of well-educated, adaptable men and women who give an honest day's work wherever they are given conditions conducive to the high standards of American labor. There are scores of new and old employers in this State today who have expressed themselves as being well pleased with the labor they have found here. This is what the researchers of Arthur D. Little's staff learned from employers of our labor both in and out of West Virginia.

"But what about the other aspect of the 'labor climate' picture, the question of labor management relations. . . .

"What is the record of West Virginia labor in industries outside of mining? The record is good. In its study of the recent record of work stoppages in manufacturing industries here, the Arthur D. Little report shows that our labor record is better than the average for all the United States manufacturing industries, and better than the average for some of our neighboring States, that we consider among our principal competitors in the quest for new industry. The meaning of this finding is that the chances of loss of production days for manufacturers in West Virginia are less here than in a majority of all other States in the union.

"One of the most interesting and significant conclusions to come out of the Arthur D. Little study concerns the State's recent experience with work stoppages. What is it that the figures show? They show that strikes occur more frequently in coal mining than almost any other industry in the world. The Arthur D. Little report shows what we already know, that most strikes in West Virginia occur in our dominant industry—coal. Interestingly enough, this situation is also true for other regions in the United States and abroad which have heavy concentrations of coal mining. Researchers do not pretend to know the precise causes of this condition, but neither do unbiased researchers claim that the fault lies either with the employers, the working man or any other particular group. But the point is that work stoppages have unfortunately become a built-in feature of the coal industry, just as it is in other major industries all over the world, such as auto workers, steel, railroads, longshoremen, et cetera. We sincerely hope this will not always be so. In diversifying our economy, it is the responsibility of business and government to look at the forest and not at one tree in planning industrial development. . . ."

PORT



ACTIVITY

ALABAMA

Mobile

February Tonnage Increased Over January—Alabama State Docks and Terminals handled 417,570 tons of traffic in February, 13 per cent more than was handled in January but 22 per cent less than was handled in February 1954.

Inbound traffic totaled 297,677 tons and again accounted for total traffic being below the comparable year-ago period. Inbound traffic was 10 per cent above January but 35 per cent below last February. The drop in incoming shipments of products of mines continued to account for the lower level of inbound traffic. Products of mines accounted for 82 per cent of inbound traffic as compared to 93 per cent in February 1954. Other groups of inbound traffic were substantially above the previous February.

Outbound traffic, which totaled 119,893 tons in February, was at its second highest level since August 1948 and was 54 per cent above February a year ago. The increase was accounted for primarily by an increase in outgoing shipments of products of mines which were nearly three times the February 1954 figure.

Peat moss imports from Germany—

Lawns may be a little greener, flowers a little prettier, from Mobile to Minneapolis, and it may be due in part to one of the products that is imported through the Port of Mobile, a product that would have been coal if we could wait for another million years. But we don't wait, pointed out Hanns Rode, economic advisor of the German Consulate for the Southeastern part of the United States, on a recent visit to Mobile. Instead we have found another important use for this product, peat moss, that is mined from the peat bogs of Germany and Holland, and used in the United States for use as soil conditioner by the U. S. nurserymen and home gardeners.

The peat moss is "quarried" very much like marble in blocks about the size of an apple crate. Soon after exposure to air, however, it develops the crumbly consistency so valuable as a soil conditioner. Mixed into a dry soil that tends to pack into concrete hardness, the moss allows air circulation and proper drainage.

Ships that bring the peat moss into Mobile are virtually peat mines themselves as a seemingly endless supply is lifted from the ship's hold. Bale upon bale of this commodity is stacked in neat rows in the adjacent covered transit sheds of

the Alabama State Docks. These stocks soon dwindle as the importer ships out the bales to various customers throughout the South and Mid-West where the moss will bring a prettier blush to some flower or a greener carpet to some lawn.

FLORIDA

Port Everglades

1954 Waterborne Commerce Record Set

—Port Everglades, Florida's deep water harbor strategically located on the state's lower east coast, set new all-time records for waterborne commerce last year. A total of 3,169,075 tons was handled as compared to 2,683,384 in 1953.

Several million dollars has been expended in recent months by heavy industry, providing additions and enlargements to facilities of major oil, roofing and asphalt companies.

The Port Authority has completed 5300 lineal feet of additional dockage space in Slip Three. The 35-foot depth throughout all water facilities, modern storage and handling equipment, and a short, straight entrance channel, (1.7 miles from the sea buoy) a belt line railroad and direct highway connections, plus the rapid growth of Southern Florida, have made Port Everglades a bustling center.

Last year 689 ships used Port facilities, as compared to 546 in 1953.

Port improvements planned for 1955, some of which are already underway, include an office building, transit shed, additional bulkheading, dredging, extension of railroad trackage, fresh water mains.

A new ferry operation through Port Everglades to Florida was inaugurated in April when the TMT Trailer Ferry, Inc., brought in 50 loaded highway trailers from Puerto Rico. The TMT Puerto Rico will operate between Port Everglades, Savannah, San Juan and St. Croix, Virgin Islands.

Jacksonville

New Waterway Committee seeks better maintenance of channels—

The Maritime Committee of the Jacksonville Chamber of Commerce has appointed a Special Committee on the Atlantic Intracoastal Waterway with the task of seeking constant maintenance of the ICW at its 12-foot project depth from Trenton, N. J., to Miami.

Edward D. Hobbs was appointed chairman by N. Frank Caldwell, who is chairman of the full Maritime Committee. A meeting of waterway users was called recently for a full discussion of the problems.

The Special Committee will undertake the tremendous task of developing factual data designed to:

(1) Evaluate the present-day needs for an intracoastal waterway along the Atlantic Coast.

(2) Determine where the presently maintained depth and width of the Atlantic Intracoastal Waterway fails to meet such needs, and

(3) What can be done to remedy the situation.

Heretofore, there has been no organized group working toward maintenance and improvement of the Atlantic ICW throughout its length. The Corps of Engineers attributes part of the failure to maintain the channel at its full depth and width to the fact that "prior to this year there has been no demand from navigation interests for more adequate maintenance." Larger barges in use on the ICW now make better maintenance essential to full use of the route.

LOUISIANA

New Orleans

New Spice Processing Plant—The Port of New Orleans now has facilities equal to any in the country for reconditioning and processing seeds, spices, and leaves, it was announced by W. J. Amoss, director of the Port.

The new plant was recently put into operation in the Foreign Trade Zone No. 2, adjacent to the port's vacuum fumigation plant. The spice plant is another new service the Port offers midwest and southern markets in this zone, Amoss said. All equipment at the plant is modern and the installation has adequate capacity for fast processing of large tonnages.

Because it is located in the zone, transport expenses to customers will be lower, J. H. Boyd, zone manager, pointed out. This "free trade area" is served directly by deep water vessels, railroads, trucks and barges and consequently local transportation costs are eliminated. In addition to this saving, freight rates from New Orleans to destinations in southern, midwest, and central U. S. cities are lower than from east coast ports.

Both the new spice processing plant and the fumigation plant are the only facilities of their types now operating among Gulf ports, Boyd added.

The new plant is operated by Pancoast Milling, Inc., a subsidiary of the B. K. Pancoast Company, Inc., custom millers of New Jersey.

(Continued on next page)

PORT ACTIVITY

(Continued from page 59)

NORTH CAROLINA Morehead City & Wilmington

Yearly Tonnages Increasing—"Cargo tonnage handling at the North Carolina State Docks has been on the increase over the past few years," said Colonel Richard S. Marr, Executive Director of the North Carolina State Ports Authority.

"In 1953 the total tonnage handled at the State Docks at Wilmington and Morehead City was 620,743 tons, and for the year 1954 slightly more than 676,015 tons were handled for the import, export and military sea trade.

"The outlook is bright for 1955, based upon the 178,702 tons handled during the first three months of this year," added Colonel Marr. "During these three months the State Terminal at Morehead City handled five steamship cargoes of tobacco, while during the same period last year none was handled. Also during this period," he said, "grain was loaded for outshipment for the first time, as was the first shipload of fish oil for shipment to Germany."

At the Wilmington State Docks during the month of March this year, the tonnages handled exceeded the amount handled during the first six months of 1954 by more than 4,000 tons. It was also during this month that the berths at the Wilmington State Docks were filled to capacity twice, and during one of these busy periods another ship was at anchor, awaiting her turn for space to unload.

SOUTH CAROLINA

Charleston

\$30-million port expenditure advocated

—Expenditure of \$30 million for development of the Port of Charleston is advocated by Charles E. Daniel of Greenville, president of the Daniel Construction Co. and former U. S. Senator from South Carolina.

Future port improvement was part of Mr. Daniel's "blueprint" for the state's development during what he called the forthcoming "Golden Decade."

He said that \$2.5 billion must be spent in this state in the 10-year period to keep up with South Carolina's industrial and population growth.

"One of the 14 ports of the nation now with \$150 million worth of business a year," Mr. Daniel said, "Charleston could well be among the top six."

Other expenditures which Mr. Daniel called necessary include development of the state's highways at a cost of \$50 million a year for the 10-year period, \$12 million for water and effluent disposal plants, \$150 million for power and \$60 million for airfields.

Mr. Daniel outlined his blueprint before the Greenville Chamber of Commerce.

Cotton imports at Charleston leads nation—Charleston continues to hold its top position as the nation's Number 1 port of entry for foreign long-staple cotton.

Marking the fifth successive year that Charleston has topped all other ports combined in imports of long-staple fiber, the port handled almost 45,000 bales in 1954, principally of Egyptian lint.

Activity on the waterfront is now at a high point as imports under the quota year which began February 1 bring heavy shipments for discharge. The cotton is of a type not grown in sufficient quantity in this country to supply domestic demands.

Charleston achieved its crown as a cotton import center in early 1949 when the State Ports Authority set up the first fumigation plant in the Southeast. Prior to that time most import long-staple fiber came through North Atlantic ports.

Substantial inland freight savings to the large Southeastern mills using long-staple resulted in a rapid growth in volume so that fumigation facilities were doubled. (For example, \$6.91 is saved in rail freight on a single 750-lb. bale of Egyptian cotton from Charleston to Greenwood, S. C., over Boston, where shipment is made in carload lots).

Well over half of the national quota moves through Charleston. Egyptian receipts last year totaled 33,858 bales, with the Sudan, Peru and Brazil also contributing to import totals. Indian and Pakistan cotton also enter the port.

VIRGINIA

Newport News

Ore pier under construction.—Tide-water Construction Company will begin construction of the Chesapeake and Ohio Railway's new ore pier at Newport News shortly. The Norfolk firm recently completed a pier for the Esso Standard Oil Company near the new pier's location and did the substructure work on the C. & O.'s coal pier No. 14.

S. E. Liles, Jr., executive vice president of the construction firm, said the contract, which amounts to about half of the total \$8,000,000 estimated cost of the project, will include dredging, driving and filling sheet steel piling cells, and construction of flooring, fenders and mooring facilities.

Norfolk

New Marine Leg in Operation at N&W Grain Elevator.—Another step forward in the N. & W.'s efforts to promote business at the Port of Norfolk has been made with completion of construction of a new marine leg to speed the transfer

of grain from ship to shore. The device has been erected at a cost of approximately \$200,000 and is now in service. It is the only facility of its kind on the Atlantic Coast south of Baltimore.

The device, designed to unload grain from ships at the rate of 25,000 bushels per hour, consists of a supporting tower, a crane-type boom, the marine leg proper (which is raised and lowered by the boom and its cables), a conveyor chute and a second leg on the tower to elevate the grain to the elevator gallery. The two legs consist mainly of housings which enclose systems of endless conveyor buckets mounted on rubber belts operating at the rate of 800 feet per minute. As the marine leg is lowered into the hold of the ship, the buckets scoop up the grain and elevate it to the top of the leg where it is dumped into the conveyor chute. Through this chute the grain flows by gravity to the bottom of the tower where it is picked up by another system of conveyor buckets carrying the grain to the top of the tower and there it is delivered to a belt conveyor located in the gallery for movement to the work house in the elevator.

The marine leg is located so that its shiploading operations can be carried on simultaneously with loading operations on another vessel.

Operation of the new facility will give the grain elevator the opportunity to develop additional business in unloading grain both from ships of the idle fleet that were loaded during periods of grain surplus, and from barges from the inland ports of North Carolina and Northern Virginia.

That the elevator—recently improved by the N. & W. with a million-dollar addition which increased the storage capacity to approximately 2,000,000 bushels—is being used effectively by the operator, the Continental Grain Company, is indicated by the fact that during 1954 a total of approximately 30 million bushels of grain were dumped in vessels by the elevator, an increase of approximately 37% over the volume dumped in 1953. The Norfolk and Western handled in road haul movement to the elevator in 1954 a total of 11,645 carloads of grain, or 51% more than in the previous year.

In charge of the Continental Grain Company's Norfolk office is E. V. N. Bissell, Jr., assistant vice president, who recently was transferred there from Minneapolis. Mr. Bissell succeeded Loren W. Johnson, vice president, who was transferred to the company's New York headquarters. A. L. Donati, also assistant vice president, is in charge of Continental's physical properties at Norfolk.

European office located in Brussels

The Virginia State Ports Authority decided to locate its European office in Brussels, Belgium. It will be under the direction of William Leslie Schultz, 42,

former Continental Freight Manager for the United States Lines.

Schultz will open the office in Brussels during the summer, it was announced by David H. Clark, executive director of the Authority, following a meeting of the seven-man board of commissioners recently. The board decided on Brussels because of this city's central location and other advantages for this kind of operation in Europe.

Schultz, an American citizen, joined the Authority February 1. He is expected to be the first full-time American port representative in Europe when he assumes his new duties, probably by July 1.

Last quarter 1954 showed healthy cargo increase—Cargo movements through Virginia ports during the last quarter of 1954 (October-December) showed an increase of 38.9 per cent in comparison with the same period of 1953, according to figures released recently by the Virginia State Ports Authority.

The increase represented 1,699,076 tons. During the three-month period in 1953, some 4,362,580 tons moved through the ports, while the same period in 1954 produced a total of 6,061,656 tons.

Last year, as a whole, proved to be a healthy one for Old Dominion ports, the Authority's figures show, for the growing amount of commerce being attracted to the ports was reflected by a total gain in export-import movements of 10.9 per cent.

Total movements for the year were 18,209,183 tons, as compared with 1953's total of 16,425,475 tons—an over-all increase of 1,783,708 tons.

TEXAS Houston

Trade solicitation increased—The Port of Houston is stepping up its trade solicitation program throughout the Central United States and in the New York area to increase its export-import business.

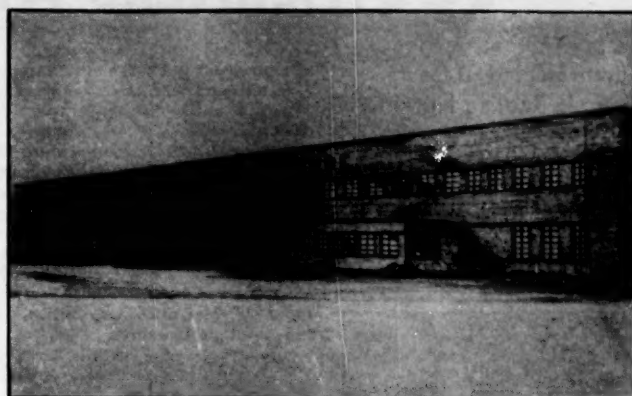
"Our representatives will be calling on more shippers throughout the 21-state area where we can offer a saving in time and money," said John Mayfield, chairman of the board of directors of the Houston Port Bureau.

John R. Weiler, who has been the Port's eastern representative in New York City, is transferring to Dallas where he will open a new Port office in the Cotton Exchange Building. John A. Lala, a veteran in the shipping business, will operate the New York office.

The Port's office in Kansas City, which is managed by Charles A. Barrows, will be expanded within the next month when an assistant manager will be named.

Mr. Lala, formerly western freight and passenger agent for the Mississippi Shipping Company, was for several years commerce manager in New York. During World War II he was in the Transportation Corps.

Mr. Weiler will open the Dallas office in May. Before joining the Port Bureau, Mr. Weiler had been with the Luckenbach Steamship Company for 25 years.



Artist's conception of new plant under construction at High Point.

North Carolina Furniture Firm Building Modern Plant

Last month, Elliott S. Wood, President of Heritage Furniture, Inc., announced the beginning of construction of a new Upholstery Plant. The new building, in High Point, North Carolina, will house the Heritage upholstery operations now being carried on at 911 West Broad Street and the Trendé operations carried on at 2441 English Street and the warehousing provided on Taylor Street. The new building will be a two-story masonry and steel structure having an enclosed floor space of 160,000 square feet. This will provide an increase of approximately 70% in total floor area. The new building is one of the largest single unit woodworking and upholstery operations ever constructed in the South. The building site is a ten-acre tract on Ward Street.

Founded in 1937 by Elliott S. Wood as a division of George T. Wood and Sons, Inc., wholesale distributors of floor coverings, Heritage has had a steady and progressive growth since its inception. Starting with a handful of employees in July 1937, the Company's first expansion was to build an 18,000-foot plant on English Street which was completed in the Fall of 1938. This building has been considerably revised and presently houses the showroom and the general offices of the Company. In April of 1939, the Company was incorporated as Heritage Furniture, Inc.

The ten-acre tract provides adequate lumber yard and the handling will be minimized by the use of a fork-lift truck. A complete dry kiln and lumber tempering storage space, together with a hydraulic lumber lift is included in the plan. It is estimated that two million feet of lumber can easily be handled on the lumber yard.

A great many new modern wood-working machines will be installed in the building, most of which will have features that have been especially built for Heritage.

Modern scientific developments in color dynamics will be employed through the plant including all walls, mechanical devices and machinery.

There will be two of the latest type hydraulic lift elevators with automatic opening and closing doors.

A loading platform of approximately 275 feet will be paralleled by the railroad siding. Electrically controlled doors will be installed in the shipping and receiving area which will allow fast handling of materials and finished products.

There will be an "in-plant" loading dock accommodating two tractor-trailers and will permit loading and unloading during all kinds of weather conditions without interfering with plant operations.

The Finishing Department will be equipped with the latest type water-fall spray booths.

To accelerate the movement of goods from the Cabinet Room to the Finishing Department, electric eye doors are being installed.

Telephone, intercommunication systems and pneumatic tubes will be used in the plant to give maximum acceleration to the handling of correspondence and orders.

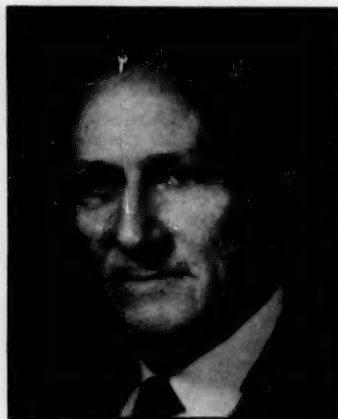
A modern, well-equipped and centrally-located first-aid room will be located in the plant office.

The increase in production facilities will require an increase in personnel. When this plant has reached capacity production, it is expected that the addition to the Company will give employment to approximately 450 people.

SOUTHERNERS AT WORK

Wilkinson Elected Treasurer Of Georgia Roofing Firm

The Board of Directors of Southern States Iron Roofing Company elected Mr. Charlie F. Wilkinson, treasurer, it has been announced by Mr. Paul H. Fox, president. Mr. Wilkinson comes to SSIRCO from Reynolds Metals Company, Richmond, Virginia, where he was



Charlie F. Wilkinson

Assistant to the Controller. He was with Reynolds for twelve years, serving in various executive accounting and treasury positions in Richmond, Louisville and Memphis.

Mr. Wilkinson, a Certified Public Accountant, received his schooling at the University of Richmond Evening School. A past president of the Richmond Chapter of the National Association of Cost Accountants, he is a member, also, of the American Institute of Accountants and the Virginia Society of Public Accountants. He is a C.P.A. in Virginia and North Carolina.

As Treasurer of Southern States Iron Roofing Company, Mr. Wilkinson will handle all financial affairs for the general office and will oversee the accounting operations in the twelve Southern cities where Southern States maintains branches.

Lion Oil Directors Elect Five New Vice Presidents

At the directors' meeting held recently, five new vice presidents were elected. Jeff Davis who has been secretary since 1931, was named vice president and general counsel; E. W. Atkinson, treasurer since 1943, was elected vice president and treasurer; J. B. Rogerson, formerly manager of manufacturing, was made vice president in charge of manufacturing; R. C. Tallman, research director, becomes

vice president in charge of research; and J. H. Sheehan, who has been manager of petroleum sales, was made a vice president.

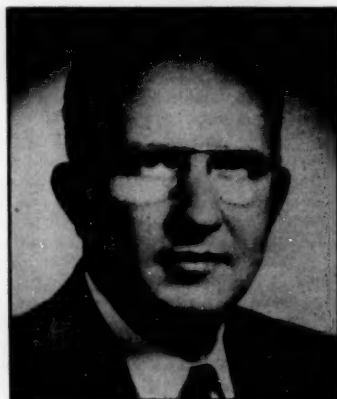
Other new officers elected were—B. L. Allen, secretary; R. P. Latimer, assistant secretary, and W. M. Rodman, comptroller and assistant treasurer.

Reelected to office were—T. H. Barton, chairman of the board; T. M. Martin, president, A. F. Reed, J. E. Howell, R. E. Minert, and C. N. Barton, vice presidents; and E. P. Marrable, assistant secretary and assistant treasurer.

Wellhofer, Layton Promoted To Direct Wire Rope Plants

George C. Gregson, plant manager of the wire rope divisions of American Chain & Cable Company for the past 30 years, retired on April 1. He has been succeeded by Ernest S. Wellhofer who will take over his duties at the company's Wilkes-Barre, Pa. and Houston, Texas plants. Charles H. Layton replaces Mr. Wellhofer as chief wire rope engineer.

Mr. Gregson joined the then American Cable Company in 1925 and made a three-month survey of conditions at its two wire rope mills in New Jersey. He was retained as plant manager to put his recommendations into effect. In 1930 he was transferred to Wilkes-Barre to manage ACCO's newly acquired Hazard Wire Rope Works as well as the American Cable operations. In 1939 he supervised construction of the company's wire rope



Ernest S. Wellhofer

plant at Houston, Texas and since then has managed both the Wilkes-Barre and Houston plants.

L. N. Thomas Elected to Board Of Bituminous Coal Research

L. Newton Thomas, president of the Carbon Fuel Company, Charleston, West Virginia, has been elected to the Board

of Directors of Bituminous Coal Research, Inc., the national research association for bituminous coal. The election was held during the Annual Meeting of BCR, last month in Pittsburgh.

Seven other Directors were re-elected to two-year terms on the Board. They are L. C. Campbell, Eastern Gas and Fuel Associates, Pittsburgh, Pa.; Joseph Pursglove, Jr., Pittsburgh Consolidation Coal Company, Pittsburgh, Pa.; J. E. Tobey, Appalachian Coals, Inc., Cincinnati, Ohio; Walter J. Tuohy, Chesapeake & Ohio Railway Company, Cleveland, Ohio; R. B. Williamson, The Pittston Company, Cincinnati, Ohio, and H. C. Woods, Sahara Coal Company, Chicago, Illinois.

H. V. Allen, Jr. Named Director Mississippi A & I Board

Henry V. Allen, Jr., of Jackson, former head of the industrial department of the Mississippi Agricultural and Industrial Board and a private consulting engineer since 1953, has been appointed by Governor Hugh White to succeed William E. Barksdale as executive director of the 33-member state promotion agency.

Mr. Allen's appointment becomes effective on May 1st when Mr. Barksdale leaves the Board after nine years to become director of public relations for Alexander Smith, Inc., of Greenville.

Mr. Allen served as the Board's industrial department head from 1951 until 1953, leaving to open a consulting engineering service. Since that time, however, he has worked very closely with members of the Board in industrial contact work. He has recently completed two surveys for the board which deal with the apparel industry and the metals industry.

Texas Eastern Elects Jacobs As New Vice President

At a meeting of the board of directors recently, John Clayton Jacobs, Jr., was elected a vice-president of Texas Eastern Transmission Corporation, according to George R. Brown, chairman of the board, and George T. Naff, president. The joint announcement stated that Jacobs, who has been executive vice-president and a director of Wilcox Trend Gathering System, Inc., a subsidiary, will continue to operate in those capacities and in addition will assume executive duties with Texas Eastern. Although for the present continuing to maintain an office in Dallas, he is expected to move during the year to Shreveport, Louisiana, where the general offices of the parent company are.

Mr. Jacobs joined Wilcox Trend Gathering System, Inc., in January, 1953. Both an attorney and a graduate engineer, he practiced law in Dallas, Texas, from 1948 until 1953.

"Not a man in sight..."

As I was driving along a country road with four other women as my guests a tire went flat. My heart sank with it, for my tire-changing experience was nil and the road was empty of aid. Pulling to the side, I hunted out the tools, remarking as I did so:

"Not a man in sight, of course. What we need is an angel from heaven!"

Imagine our astonishment when a cheery voice above our heads said, "I'll be down in a minute, lady." Unknowingly, I had stopped beside a telephone pole at the top of which sat our "angel"—a line repairman.

From the Reader's Digest feature, Life in These United States . . . "true stories showing appealing or humorous sidelights on the American scene."



A Friend in Need

We got a chuckle out of that little story and we hope you did too. Best thing about it is that it isn't an isolated case.

Many a time each day, telephone men and women go out of their way to help someone in trouble. Their friendly, neighborly spirit is one of the nice things about telephone service.

BELL TELEPHONE SYSTEM



NEW PRODUCTS

Fire Preventive Drum Container

Protectoseal Co., 1920 S. Western Ave., Chicago 8, Ill.—By simply tightening the wing nut of the band attached to the



Fire preventive cover.

Protectoseal Thermo-Acting Drum Cover any used 55-gallon, 30-gallon steel drum or standard corrugated trash can is made into a large-size fire preventive container. The cover according to the manufacturer makes the unit a thoroughly safe receptacle for oily rags or swabs, oil soaked work clothing, paints, solvents, excelsior, packing materials, waste paper and all similar potentially dangerous combustibles.

The drum cover is a sturdy steel stamping, painted red, which fits firmly over the edge of the cover or can. It has a specially designed hinge incorporating a spring plunger which attaches the cover to the steel strap. To convert the unit into a fire preventive container, it is only necessary to place the strap around the upper part of the drum with the cover closed for correct positioning, and tighten the wing nut. Raise the cover and the container is ready for use.

Emergency Damper Opener

The Propellair Division of Robbins & Myers, Inc., Springfield, Ohio has introduced a new thermally actuated emergency damper opener for its Sky-Blast power roof ventilators.

The unit is designed to allow the roof ventilator to serve as a venting device for smoke, heat and fumes in the event of fire. This has been a particular problem in modern one-floor buildings where smoke quickly spreads radially, preventing fire-fighters from getting to the source of the blaze.

Consisting of twin high-torsion alloy steel springs mounted on a telescoping

steel tube support, the device is completely independent of electrical equipment which might be damaged by fire or water. There are no motors, thermostats, wiring or counterweights. The two steel spring arms are held in place by a fusible link which breaks when the pre-selected critical temperature is reached. These arms immediately open the dampers, providing an unobstructed escape route for smoke and fumes. The device functions independently of fan operation.

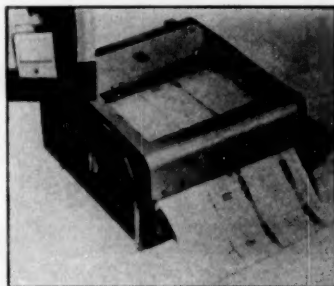
The unit is available in two sizes for roof ventilators from 24 inches to 60 inches in diameter. A wide range of temperature ratings is available, permitting selection of the one best suited for a particular application. These ratings range from 135 to 360 degrees F.

The device can be readily installed with only eight bolts on roof ventilators already in service.

Light, Portable Oscillograph

Brush Electronics Co., 3405 Perkins Ave., Cleveland 14, Ohio.—Lightweight, portable oscillographs are the new developments in the field of recording systems has been announced by the firm.

The new portables are designed for either four or six channel recording. The four channel oscillograph weighs 36



Lightweight oscillograph.

pounds and the six channel recorder is 48 pounds. Despite their light weight and compactness, either model provides full range instrumentation, the manufacturer states.

Designed for flexibility, each unit offers a range of 16 chart speeds with the travel variation of from 10 inches per day to 10 inches per second to simplify the testing problems of electrical variables, vibration, torque, stress, strain and other desired measurements.

Both models, equipped for either ink or electric writing, can record a greater range of signals with optimum resolution than other direct-writing oscillographs, it is claimed.

Centralized Lubrication System

Lincoln Engineering Co., Industrial Division, 5702-13 Natural Bridge Ave., St. Louis, Mo.—A simple, positive, high

pressure centralized system has just been announced for controlled lubrication of bearings while machine is operating or while idle.

The pumping unit is manually-operated and incorporates a 15-lb. capacity reservoir for grease or oil. A few strokes of the pump handle forces lubricant under 2500 psi pressure through a single line circuit of injectors, or adjustable hydraulic force-feed measuring valves, one for each bearing. These injectors, or valves, in turn deliver a measured quantity of oil or grease to each bearing every time the system is cycled.

After a few strokes of the pump handle, an indicator device shows when lubrication cycle is complete. Release of pump handle by operator automatically vents and recharges system. Pump has button head filler fitting for refilling reservoir from a bucket pump, or may be hand-packed. System comes complete with all necessary accessories. No special tools or engineering knowledge required to install system.

Compact Welding Helmet

Carruthers and Fernandez, Inc., Santa Monica, Calif.—A new-type welding helmet "Chin-Lense" that frees both hands for welding at all times by permitting the operator to raise or lower the welding lens with a slight pressure of the chin is now available.

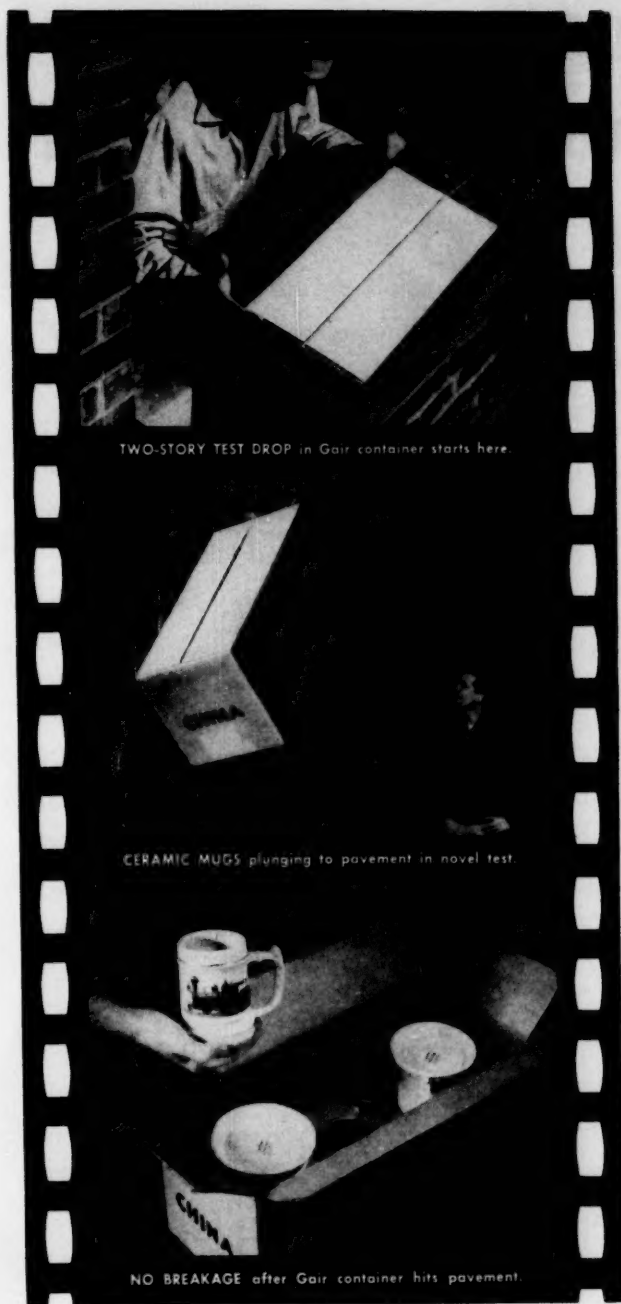
According to its manufacturers, the helmet will increase welding production as much as 50 per cent by saving time usually consumed by manual adjustment of conventional helmets.

Flashproof, splatterproof and lead-proof, the compact helmet features a patented chin pad that requires only a quarter-inch motion of the chin to drop the welding lens, giving complete visibility through the clear inside safety glass and filter lens which protect the welder's eyes. Removal of the slight pressure instantly returns the welding lens to its perfectly-sealed welding position. The helmet also allows the operator to start his arc in only five seconds instead of twenty seconds required when using



Chin operated helmet.

the standard helmet, and enables the welder to get to his work in tight quarters leaving hands completely free at all times and preventing accidents.



Ceramic mugs tumble two stories – no damage!

**New shipping container
holds breakage claims
to phenomenal 0.035%**

That's the happy ending to L. G. Balfour Company's long search for the safest practical way to ship ceramic mugs.

General Manager Ed Holder faced a twofold packaging problem. First, ceramic mugs need a lot of protecting in transit. Second, the package had to take three different styles and sizes of mugs.

Gair came up with the answer to both problems with one ingeniously die-cut interior packing piece which cushions the mugs from all shocks. Out of 150,000 units shipped in the new container, only 53 breakage claims have been made. Also, since no partitions have to be set up and no excelsior or paper-stuffing is used, one packer now does the work of *four* previously required.

Whether it's protection, display or delivery you're looking for in a shipping container, Gair has the experience and facilities to give it to you. Write us.

SC.5.1

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Mertinsville, Va.: Phone 2-177-8; LD 101
3200—322 Williamsburg Ave., Richmond, Va.: Phone 2-6549



GAIR

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ROBERT GAIR COMPANY, INC. • 155 EAST 44TH STREET • NEW YORK 17, N.Y.

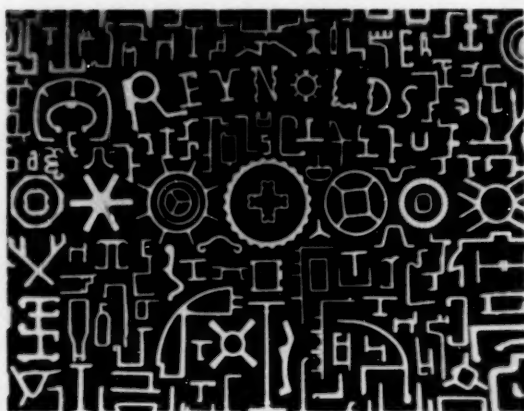
MAY NINETEEN FIFTY-FIVE

65

Reynolds Aluminum Foil is Part of the VIRGINIA STORY



Presses similar to this will soon provide employment for 200 more Virginians.



The extrusion market has tripled in the past five years. Many of these shapes are utilized in today's expanding building industry.

In any report on the growing prosperity and continuing expansion of Virginia, honorable mention must be made of the men and women who produce aluminum foil for packaging, for labels, for yarn and most recently for publication stock at Reynolds Richmond Plants.

Largely because of the successful operation of the foil plants, Reynolds is beginning construction of a \$3,000,000 aluminum extrusion plant, just 14 miles from downtown Richmond, on Reynolds Bellwood property in Chesterfield County.

This new plant will supply extruded shapes for the architectural, construction and transportation industries from extrusion presses now being built. The growing demand of the Eastern market has made this addition advisable.



REYNOLDS METALS COMPANY
RICHMOND 19, VIRGINIA

THE *Virginia* STORY





As Virginia's largest State-chartered bank . . .

With resources of more than \$170,000,000 . . .

State-Planters is enthusiastically interested in working with business and industry to help make the great State of Virginia an increasingly greater state.

State-Planters Bank and Trust Company is *at your service*. Call on us at any time you think the assistance of sound and progressive banking organization will be helpful.



"A Symbol of Service Since '65"

State-Planters *Bank and Trust Company*

RICHMOND, VIRGINIA

MEMBER FEDERAL RESERVE SYSTEM

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

THE VIRGINIA MARKET

RAPIDLY expanding demand for all types of goods and services is constantly demonstrating the attractiveness of Virginia markets to producers and distributors of all areas.

The chief factors which contribute to the success of markets are folks, funds and facilities.

In all three categories the Old Dominion has been achieving enviable growth over wide periods of time.

Population

Since 1900 population in Virginia has increased from 1.8 million to 3.6 million, a two fold gain.

Gain throughout the Nation has been at approximately the same rate with greatest growth occurring in the Far West where wide open spaces with few people were in existence at the turn of the century.

Virginia, along with the rest of the South, has made net population gains at much swifter rate than the Middle West which in 1900 rated about the same type of economy as that of the South. Growth in the South also has been at swifter rate than in New England which at the beginning of the century was already highly industrialized.

Compared with the Middle Atlantic and Central Industrial regions of the United States, Virginia's population growth has been just about on a par.

Purchasing Power Is Required

Purchasing Power is second only to people and their desire to buy as a stimulus to market strength.

Here again Virginia can unfold a record of real distinction.

Reading from the reports of the U. S. Department of Commerce, issued by its Office of Business Economics, it is to be noted that Per Capita Income Payments to Individuals have been increasing in Virginia at a much swifter pace than in the Nation at large.

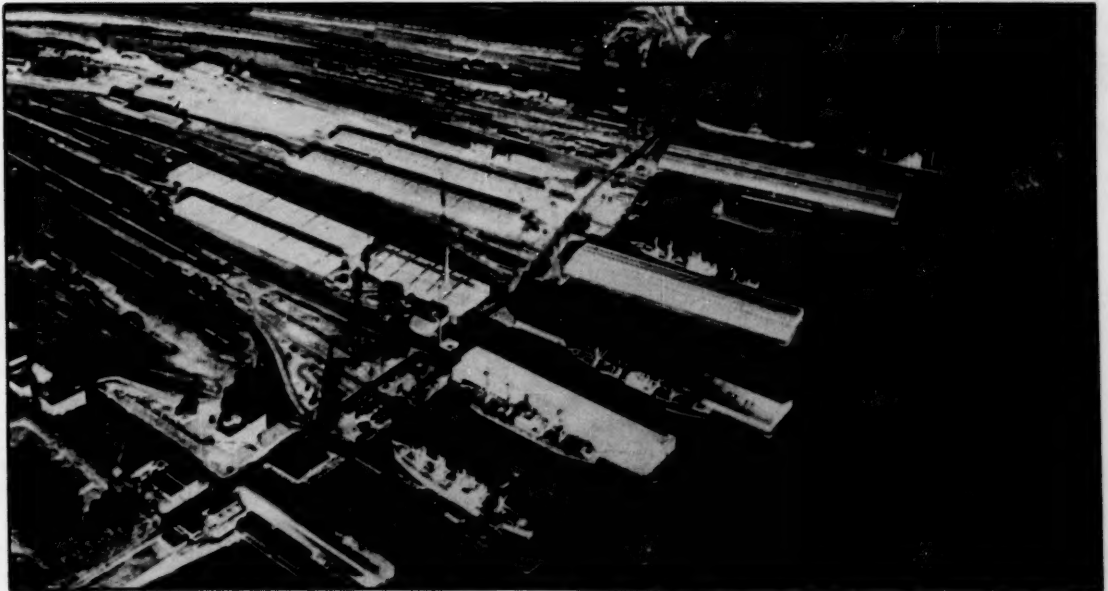
Accurate records of these payments extend back only as far as 1929, but even that length of time is a quarter century, certainly long enough to substantiate a definite trend.

Between 1929 and 1953 Per Capita Payments to Individuals increased 222 per cent in Virginia, while in the United States as a whole the increase was but 151 per cent. At this point it is well that all Southerners be reminded, however, that Southern incomes still rate considerably lower than the National average. Further shifts of population from rural to urban sections and from farms to factories must occur before income parity can be fully achieved.

Growth Is The Lodestone

The fact that Virginia incomes are growing at paramount rates is, however, a matter of high importance.

It is toward areas of growth that salescrafters direct their sights, and it is in these same areas that new



Serving the markets of Virginia and beyond are these Chesapeake and Ohio Railway facilities at Newport News.



A variety of products fill the needs of the market. Here a huge electric crane moves superphosphate at Virginia-Carolina Chemical Corp.'s, Richmond plant.

plants for production and distribution are allocated.

Like other elements of fluid nature, sales flow into the less saturated areas, and with them go all the healthgiving vitality that builds new economic empires.

Further evidence of the growing strength of Virginia purchasing power is to be seen in the relative rates of recent Bank Deposit growth. In 1948, for example, total bank deposits in the United States were \$161.2 billion. In 1953 they were \$189.2. A gain of 17 per cent.

In 1948, Virginia Bank Deposits totaled \$1.8 billion, and in 1953 they were \$2.2 billion, an increase of 22 per cent.

Markets Well Diversified

Market resources such as bank deposits cannot be attributed in toto to individual ownership. An important increment belongs to corporations and represents additional if different market potential.

The difference is that corporation funds generally flow into Capital Goods markets. This is an important market area.

With a total plant valuation at present of \$5.2 billion, Virginia industry must make annual purchases of Capital Goods amounting to almost \$500 million just to replace worn and obsolescent equipment.

In addition, over such years as the past five, it requires another \$500 million or new plant and expansions. It has required capital at about that rate to bring the \$2.8 billion plant valuation of 1949 up to the \$5.2 billion of 1954.

Here, then are expenditures by Virginia Capital totaling not less than One Billion Dollars a year, and when these are added to Consumer Purchases of \$3.7 billion the result is a combined End-Product purchase of \$4.7 billion annually by the people and industries of the State.

And even then the total figure for the State's Market Potential has not been fully stated, for there are still to be considered the many millions that go into raw materials and fuels that are used within the State for productive purposes. These, however, are chiefly an intra-state matter, of interest to the purveying fraternity only to the extent that they are utilized in the production of salable commodities. Altogether they amount to almost \$3 billion.

When it comes to distributing facilities no state is better equipped than Virginia.

Railroads, Power, Seaports—the Big Three in Distribution—are of the highest order, and supplementing these are highway and airway systems, warehouses and handling equipment, second to none elsewhere.

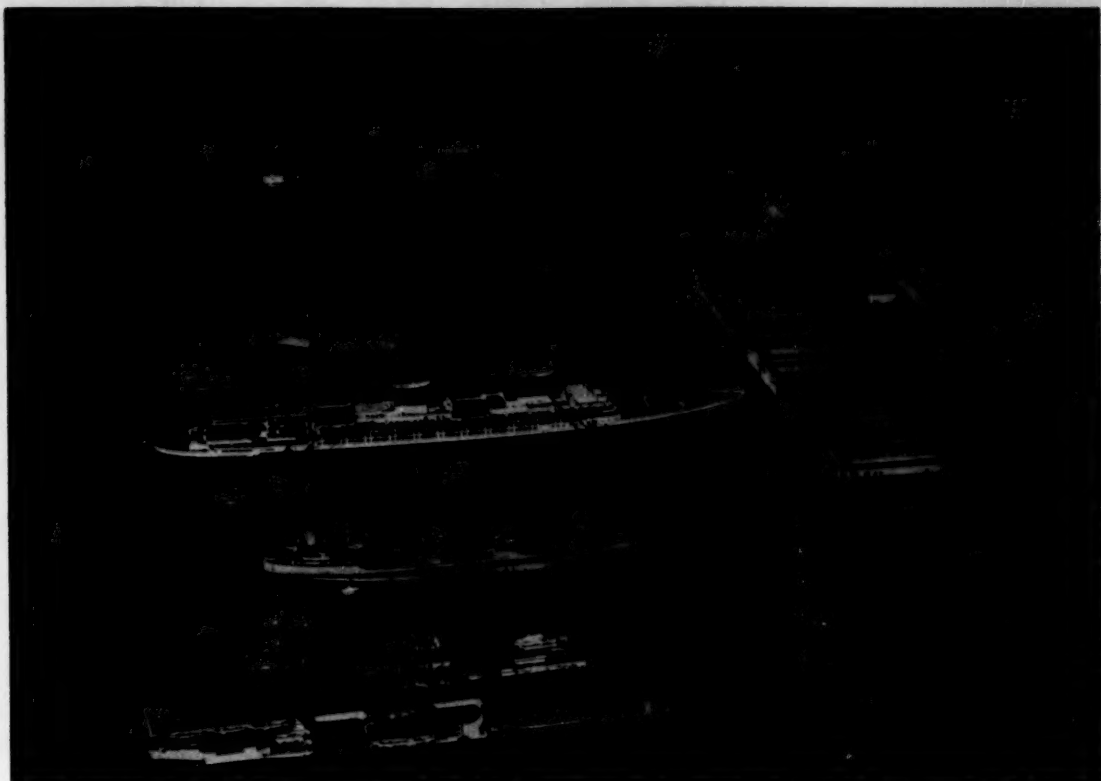
Eleven railways cover a total of 4,400 miles in the State. These are Atlantic & Danville, Atlantic Coast Line, Carolina & Northwestern, Carolina Clinchfield & Ohio, Chesapeake & Ohio, Chesapeake & Western, Richmond Fredericksburg & Potomac, Norfolk & Western, Seaboard Air Line, Southern Railway and Virginian Railway.

Most of the electric power provided in the State is furnished by Potomac Edison Co., Virginia Electric & Power Co., and Appalachian Electric Power Co.

VALUE OF VIRGINIA INDUSTRIAL PLANT AND EQUIPMENT—1954

Manufacturing	In Millions
Nondurable Goods	\$ 713
Durable Goods	208
All Manufacturing	921
Non-Manufacturing	
Farms	\$1,276
Mines	96
Construction	86
Utilities	1,498
Finance-Realty	743
Wholesale	100
Retail	286
Services	185
All Non-Manufacturing	4,270
All Enterprise	5,191

Manufacturing Groups	In Millions
Food Manufacturing	\$ 81
Tobacco	54
Textiles	135
Apparel	8
Pulp-Paper	81
Printing-Publishing	81
Chemicals	332
Petroleum-Coal Prod.	6
Rubber & Products	2
Leather & Products	4
Lumber	50
Furniture	18
Stone-Clay-Glass	24
Primary Metals	26
Fabricated Metals	18
Machinery	6
Electrical Machinery	*
Transport Equipment	60
Instruments	3
Miscellaneous	3
*Too small to tabulate	



A portion of the vast plant of the Newport News Shipbuilding and Dry Dock Co., which extends along the waterfront for more than a mile.

Manufacturing

AS a source of income and in number of persons employed, manufacturing is one of Virginia's leading industries. Agriculture, once the leading source of income in the state, has shown a steady downward trend in number of persons employed during the past ten years. It is interesting to note that in the past decade a decrease of 25 per cent in number of persons engaged in agriculture has been balanced by an increase of slightly over 20 per cent in the number employed in manufacturing. The declining trend in farm employment is explained in part by increased use of mechanical equipment and labor saving devices on the farm. It is estimated that around 95 per cent of Virginia farms had electric power in 1953, as compared with 25 per cent in 1940. A considerable portion of those who are leaving agriculture are shifting to manufacturing, although utilities, services and trade are claiming their proportionate share of the labor market.

Manufacturing Raises Income

Generally speaking, civic and industrial leaders are seeking to place industries in those areas that have a surplus of farm laborers. In some of these areas farm

income is supplemented by work in factories which have moved into the area; and industrialization has raised family incomes and contributed to a rise in standard of living in Virginia as in the nation in the past decade.

Productive Centers Are Widespread

There are ten major productive centers in the state and nearly as many more of somewhat smaller size. In all of these there still exist substantial pools of labor, despite the fact that these pools have been drawn upon over recent years by expanding business.

Altogether there are over 5,700 manufacturing plants in the state. Of these nearly 500 hundred are establishments employing over 100 persons each, with a goodly share employing over 1000. The greatest number of the establishments with 100 or more employees is found in the textile industry, which has 70 such plants. Next ranking industry in number of large plants is the food manufacturing group with 43 such plants.

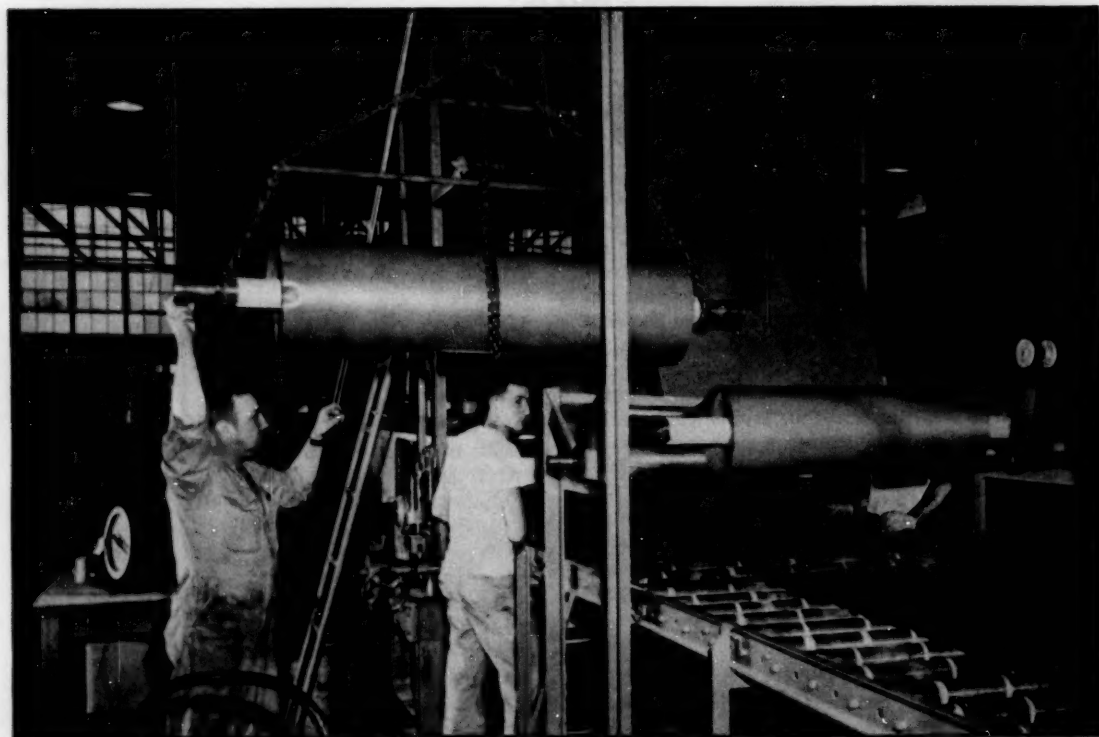
Third in rank is apparel, which since the end of the war has been gaining ground at a rapid pace. There are 42 large apparel factories in the state.

VIRGINIA MANUFACTURING **\$ million**

Industry	Income	Cost of Services	Value Added	Cost of Materials	Output Value	1939 Value Added
Food	\$ 99	\$ 46	\$ 145	\$ 434	\$ 579	\$ 32
Tobacco	102	78	180	762	942	86
Textiles	120	50	170	264	434	43
Apparel	41	21	62	78	140	12
Pulp-Paper	75	20	95	92	187	21
Printing & Publishing	29	13	42	19	61	13
Chemicals	272	149	420	496	916	72
Petrol.-Coal Prod.	1	1	2	8	10	1
Rubber & Products	4	1	5	6	11	*
Leather & Products	16	2	18	26	44	5
Nondurables	\$ 759	\$380	\$1,139	\$2,185	\$3,324	\$285
Lumber	\$ 56	\$ 29	\$ 85	\$ 80	\$ 165	19
Furniture	41	34	75	49	124	15
Stone-Clay-Glass	29	12	41	23	64	8
Primary Metals	20	7	27	16	43	5
Fabricated Metals	39	21	60	32	92	9
Machinery	13	2	15	11	26	2
Elec. Machinery	1	*	1	1	2	*
Transportation Equipment	138	12	150	214	364	28
Instruments	8	1	9	3	12	2
Miscellaneous	9	3	12	8	20	3
Durables	\$ 354	\$121	\$ 475	\$ 437	\$ 912	\$ 91
All Manufacturing	\$1,113	\$501	\$1,614	\$2,622	\$4,236	\$376

Fourth industry in this respect is furniture with 30 plants; and ranking in order of number of plants in operation the following may be listed: chemicals with

29 plants; pulp-paper, 27; lumber, 24; tobacco, 22; fabricated metals, 22; stone-clay-glass, 15; leather and products, 13; transportation equipment, 12; printing



Sulvyn—clad metal laminate coming from the mill of O'Sullivan Rubber Corp.'s plant at Winchester.

and publishing, 11; primary metals, 10; miscellaneous manufacture, 8; machinery, 5; instruments, 3; rubber, 2; and finally, petroleum-coal products and electrical machinery with one plant each.

Expansion Follows Traditional Line

In the expansion of the manufacturing industry, Virginia is apparently maintaining traditional relationships that have long existed between groups. According to value added by manufacture, tobacco, chemicals, food textiles, and transport equipment continue to be the Big Five in the state's factory line-up, just as they were in pre-war days. In three of these groups—chemicals, food and textiles—the growth in the state has exceeded, percentage-wise, that of the nation.

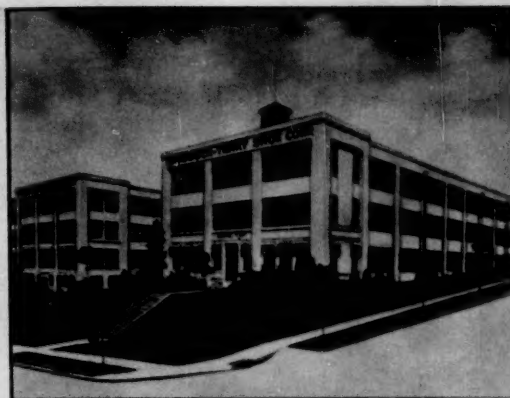
In tobacco, increase of output has been on a par with the national growth, while in transport equipment as in most others of the hard goods group, United States growth has somewhat surpassed that of Virginia. The following table illustrates the percentage changes that have been taking place with respect to both state and nation.

VIRGINIA MANUFACTURING GROWTH Output in \$ millions

Group	Output		Per Cent Change	
	1939	1954	Va.	U. S.
<i>Nondurables</i>				
Tobacco	\$353	\$942	167	169
Chemicals	123	916	645	384
Food	96	579	503	326
Textiles	97	434	347	221
Pulp-Paper	53	187	253	339
Apparel	31	140	351	213
Print-Publish.	18	61	239	224
Leather	18	44	144	132
Rubber	2	11	450	270
Petrol-Coal	2	10	400	482
Nondurables	\$793	\$3,324	319	299
<i>Durables</i>				
<i>Per Cent Change</i>				
Group	1939	1954	Va.	U. S.
Trans. Equip.	\$59	\$364	517	536
Lumber	37	165	346	452
Furniture	37	124	235	214
Fab. Metals	23	92	300	277
Stone, etc.	17	44	276	316
Pri. Metals	14	43	207	207
Machinery	4	26	550	515
Miscellaneous	3	20	566	451
Instruments	2	12	500	773
Elec. Machinery	*	2	566	764
Durables	\$196	\$912	365	397

Richmond is Largest Center

Chief among the industrial centers of the state is Richmond, also the capital of Virginia. Both Henrico and Chesterfield Counties are included in the Richmond metropolitan area. Just before World War II there were 380 manufacturing plants of varying sizes in this area. Now there are not fewer than 435 such plants, a gain of 55, or 14 per cent. Among the present number are 60 plants employing large numbers of persons.



Craddock-Terry Shoe Corp.'s central plant at Lynchburg. The firm operates eight factories and three district houses in the state.



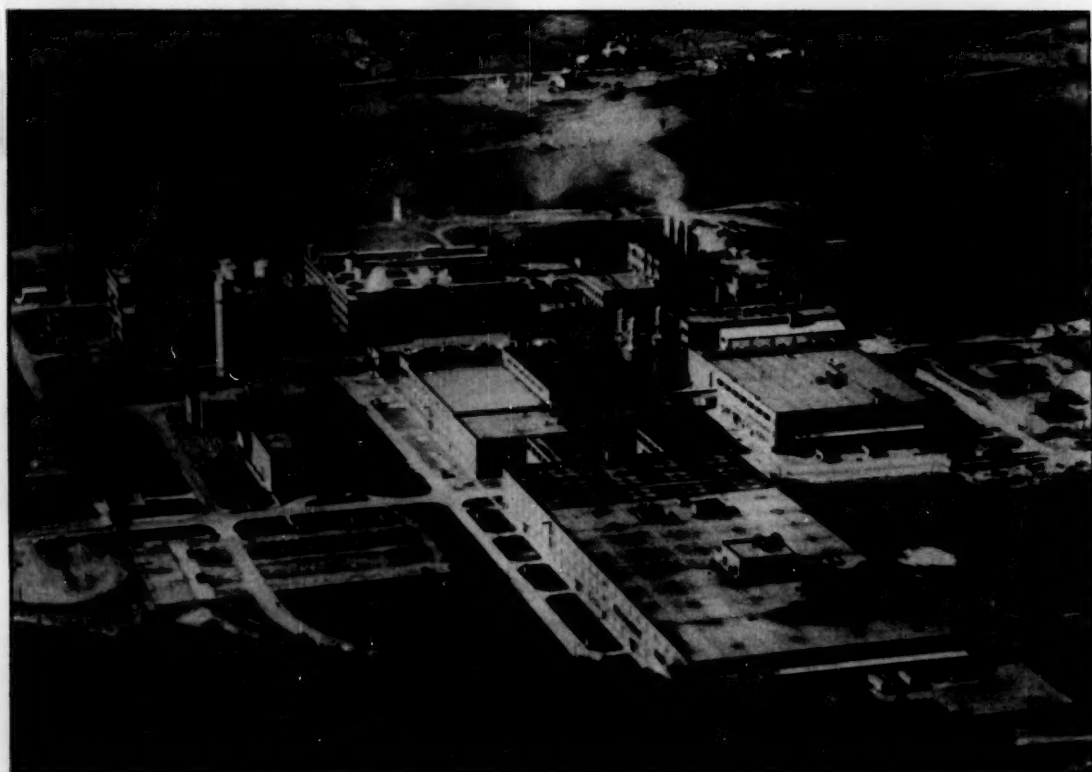
Schoolfield Division of Dan River Mills in Danville. The process is complete from raw cotton to finished goods.



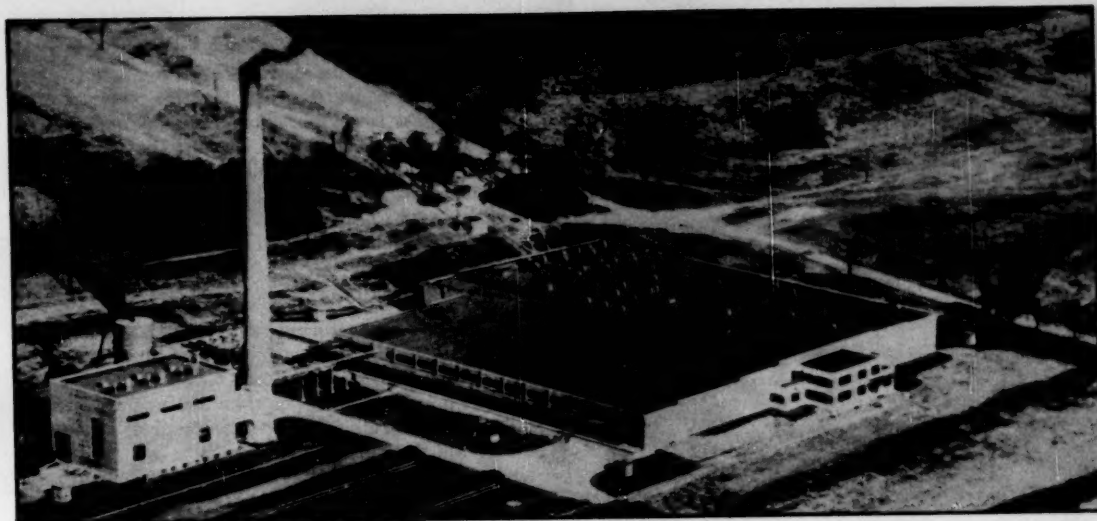
The Rocky Mount home of the Bald Knob Furniture Co. The firm was established in 1907 and specializes in bed room furniture.



Monroe Calculating Machine Co., Inc., at Bristol, where a complete line of machines are produced.



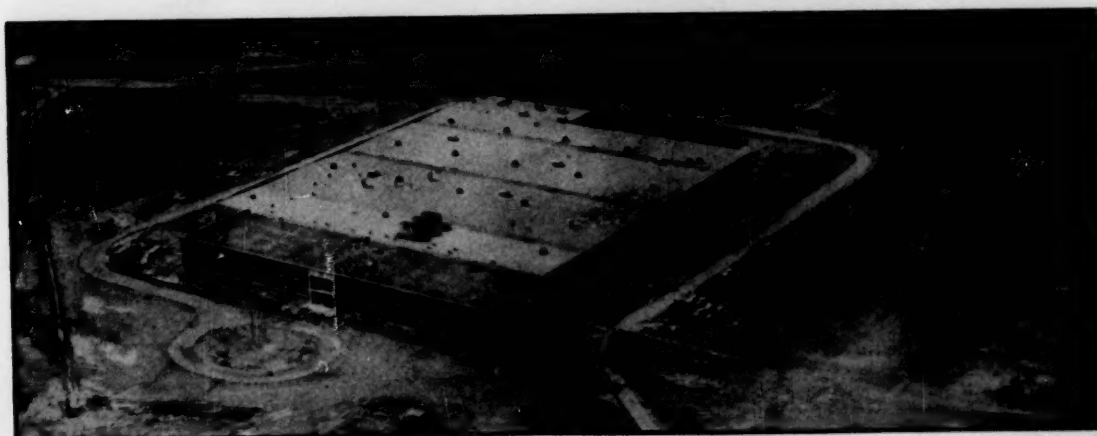
Aerial view of the mammoth plant of the Celanese Corporation of America at Narrows. This is one of three plants operated by Celanese in Virginia, and it produces acetate filament yarn and acetate staple fiber.



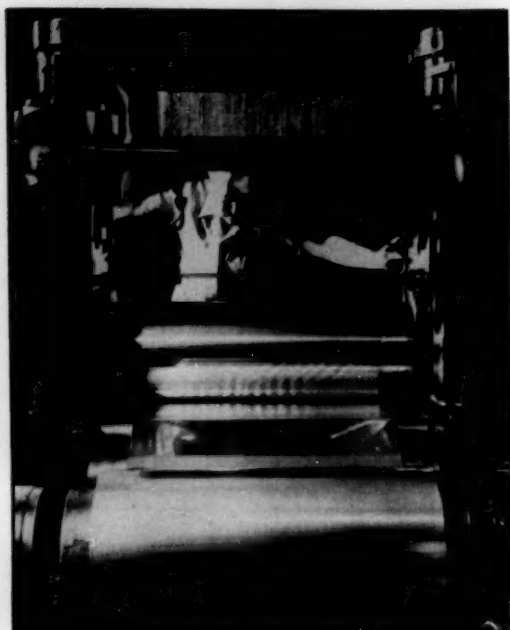
Burlington Mills' Altavista finishing plant, one of several throughout the state.

Business Volume

Industry	1954				1953	1939
	Active Estab. (000)	(000) Persons Engaged	Income (\$ Mil.)	Output (\$ Mil.)	Output (\$ Mil.)	Output (\$ Mil.)
Farming	150.4	291	\$277	\$531	\$525	\$195
Other Rural3	10	10	19	20	6
Mining	1.0	18	60	99	117	36
Raw Materials	151.7	319	\$347	\$649	\$662	\$237
Construction	8.1	84	383	772	782	91
Manufacturing	5.7	251	1,113	4,236	4,477	989
Processing	13.8	335	\$1,496	\$5,008	\$5,259	\$1,080
Utilities	4.0	89	435	709	749	125
Finance	4.6	41	247	542	531	86
Supplementary	8.6	130	\$682	\$1,251	\$1,280	\$211
Wholesale Trade	3.4	44	176	2,341	2,505	628
Retail Trade	33.7	179	669	3,124	3,173	628
Service Trade	13.7	106	286	476	463	153
Distributive	50.8	329	\$1,131	\$5,941	\$6,141	\$1,409
All Enterprise	224.9	1,113	\$3,656	\$12,849	\$13,343	\$2,937



Recently completed plant of the General Electric Co. at Waynesboro. This new specialty control plant went into production early this year.



Aluminum foil rolling mill of the Reynolds Metals Co., South Plant at Richmond.



American Viscose Corp., at Front Royal, produces rayon tire cord as the principal product.



Lynchburg Foundry Co.'s plant at Lynchburg. Producers of cast iron pressure pipe and grey iron castings.

Fifty-two of these large plants are located in the City of Richmond and comprise nine food establishments, ten tobacco, one textile, eight apparel, one lumber, one furniture, eight paper, four printing, one chemical, one stone-clay-glass, seven fabricated metal, one machinery, and one transport equipment. Beyond the city limits, in Henrico County are two lumber, one printing, one stone-clay-glass and one miscellaneous manufacturing establishment. Chesterfield County has two large chemical manufacturing plants.

Norfolk Rates High

Second in manufacturing rank in the state is Norfolk, with the cities of Portsmouth and South Norfolk contributing staunchly to the total output of the Norfolk metropolitan area. No fewer than 290 manufacturing establishments are now located in the area, a gain of 24 over the pre-war list of 266.

In point of numbers food factories rank first in this area, but it is doubtful if this group is more important than the 20 transportation equipment plants, most of which are devoted to shipbuilding. When it is remembered that Norfolk, Portsmouth and Newport News constitute the major portion of the Hampton Roads harbor system, the shipbuilding enterprise of the area takes on added significance. It should be stated for the record, however, that there are 66 food manufacturing plants in the area. Of the 290 factories 37 are large plants with employees numbering more than 100 each. Chief among these as regards output are the shipbuilding establishments, 9; food, 12; lumber, 5; chemicals, 3; and one each of textiles, apparel, furniture, printing, stone, etc., primary metals, and miscellaneous manufactures.

Roanoke Growing Fast

Third in manufacturing output in the state is Roanoke (city and county). Factory numbers have increased more than a third since the end of World War II, an exceptionally swift rate of increase. Before the war there were 105 manufacturing plants in the area; today there are no fewer than 153.

Greatest expansion in number of factories has occurred in food, lumber, furniture, chemicals, stone, etc.,



Pulp mill of the Chesapeake Corporation at West Point, one of the largest in the state.

Urban Business Volume—1954

		(\$ Million)					
City	Urban Area County	Farm- Rural	Manu- factur- ing	Trade	Service Trade	All Other	Business Volume
Richmond	Henrico-Chesterfield	\$ 9	\$1,202	\$1,235	\$131	\$ 590	\$ 3,167
Norfolk- Portsmouth	Norfolk-Pr. Anne	14	409	1,024	98	312	1,857
Roanoke	Roanoke	5	330	344	28	153	860
Danville	Pittsylvania	28	243	202	16	64	553
Alexandria	Arlington	*	17	289	26	178	510
Newport News	Warwick	2	193	160	16	67	438
Lynchburg	Campbell	6	163	179	15	75	438
Staunton- Waynesboro	Augusta	17	104	84	7	48	260
Petersburg	Dinwiddie	8	79	88	11	40	226
Charlottesville	Albemarle	9	57	82	7	33	188
All Metropolitan		\$ 98	\$2,797	\$3,687	\$355	\$1,560	\$ 8,497
All Other		\$452	\$1,439	\$1,778	\$121	\$ 562	\$ 4,352
Virginia		\$550	\$4,236	\$5,465	\$476	\$2,122	\$12,849

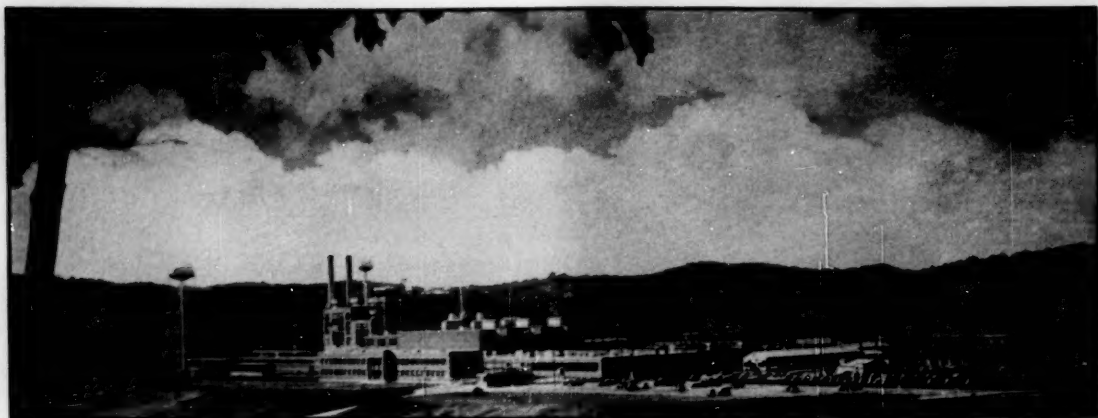
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Urban Income & Expenditure—1954

		Popula- tion (000)	Total Income (\$ Mil.)	Per Capita Income	Con- sumer Sales (\$ Mil.)	Per Capita Con- sumer Sales
City	Urban Area County					
Richmond	Henrico-Chesterfield	391	\$ 798	\$2,041	\$ 664	\$1,698
Norfolk- Portsmouth	Norfolk-Pr. Anne	491	606	1,234	573	1,167
Roanoke	Roanoke	159	243	1,528	218	1,371
Danville	Pittsylvania	121	167	1,381	115	951
Alexandria	Arlington	337	466	1,383	321	953
Newport News	Warwick	97	146	1,505	131	1,351
Lynchburg	Campbell	92	130	1,413	119	1,294
Staunton- Waynesboro	Augusta	80	95	1,188	76	951
Petersburg	Dinwiddie	65	87	1,339	74	1,139
Charlottesville	Albemarle	63	82	1,302	73	1,159
All Metropolitan		1,896	\$2,820	\$1,487	\$2,364	\$1,247
All Other		1,692	\$1,405	\$ 831	\$1,291	\$ 763
Virginia		3,588	\$4,225	\$1,178	\$3,655	\$1,019



The Ford Motor Company's assembly plant in Norfolk is Virginia's only automobile manufacturing facility. Throughout the state Ford employs more than 1,910 people and has a yearly payroll of approximately \$9,100,000.



Panoramic view of the nylon plant of E. I. du Pont de Nemours & Co. at Martinsville.

and primary and fabricated metals. The type of growth represented is exceptionally well diversified. Of the total, 26 plants are of above-average size. One of these is devoted to production of railroad locomotives and other rolling stock; another is engaged in the production of rayon and similar products. The Norfolk and Western Railway has its headquarters in Roanoke.

Danville is Textile Metropolis

Danville, fourth Virginia city in point of manufacturing output, is noted worldwide for its outstanding textile production. Including the county of Pittsylvania of which Danville is the business center, the metropolitan area takes in a total of 110 manufacturing plants, of which 42 are within the city limits. Before the war there were only 44 manufacturing plants of all sizes and in the post-war years 28 establishments have been added to this number. A further 38 small lumber and logging camps have been set up, these being staffed with fewer than 10 hands on the average. Substantial and diversified growth is to be noted with gains of 7 in tobacco, 1 in textiles, 3 in apparel, and one each in chemicals, stone, etc., fabricated metal, printing and

miscellaneous manufactures. Two of the Danville textile plants are among the largest in the world.

Newport News Growing Steadily

Besides sharing in the shipbuilding industry of the area, Newport News and Warwick (formerly a county, but now incorporated as a city) possess 60 manufacturing plants of diversified types. Before the war the number was only 32, an indication that here again growth has been extensive and rapid. The increase has been chiefly in the building and lumber industries, reflecting the exceptional amount of new construction which has been undertaken in this area. Gains have been made also in food, apparel and metal products.

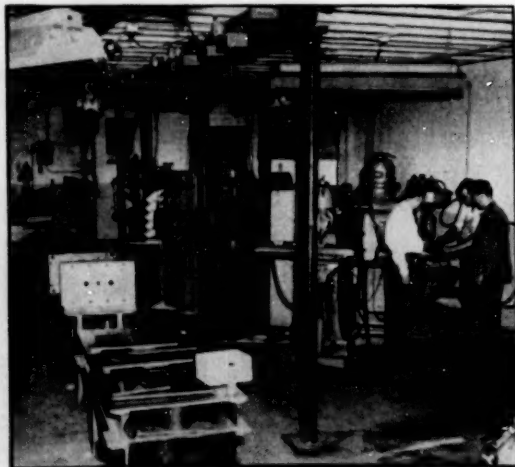
Other Important Productive Centers

Lynchburg is an industrial center of growing importance. With large establishments turning out tobacco products, textiles, apparel, furniture and metal products, the community is also seeing impressive growth in new chemical and leather manufactures. There are now over 100 manufacturing plants in the Lynchburg-Campbell County area, and 25 of these are above-average size.

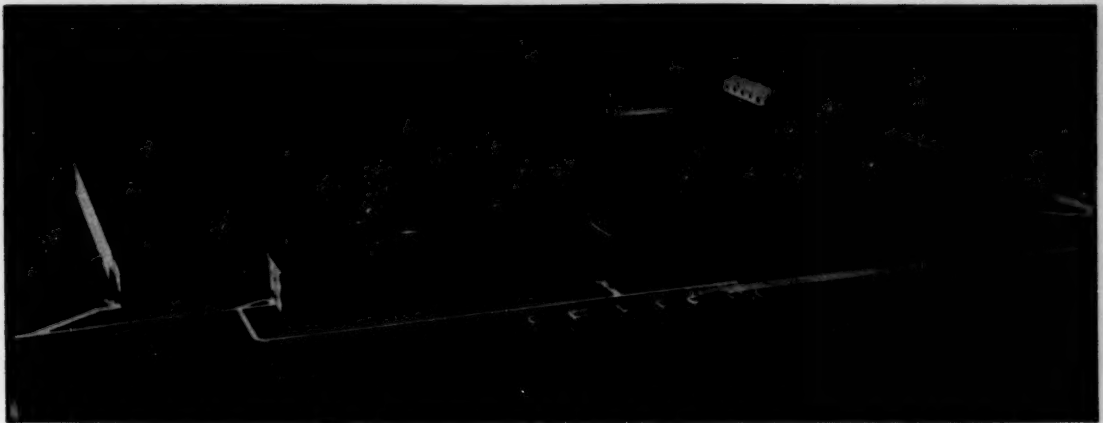
In Augusta County the independent cities of Staunton and Waynesboro form a manufacturing center. It is Waynesboro, however, which at present is contributing most toward industrial achievement, with 68 of the area's 80 plants located there. Staunton also makes a notable contribution to Virginia's educational facilities as the home of several well known schools and colleges.

The Petersburg-Hopewell area, including Dinwiddie and Prince George Counties, possesses important establishments for the manufacture of tobacco products, apparel, paper, stone-clay products, chemicals, metal products and scientific instruments. Such establishments now number nearly 100 as compared with little more than half that number before the war. Many of these are large plants.

Charlottesville and Albemarle County make up an industrial area containing 65 manufacturing plants, a gain of 17 in the past 15 years. Industrialization is continuing in cooperation with the research facilities available at the University of Virginia.



A section of Hake Plastic Box Corp.'s Roanoke plant. The firm manufactures a wide variety of plastic products.



Westinghouse Electric Corp.'s new Staunton plant now in production is the nation's most automatic plant devoted exclusively to the manufacture of packaged air conditioning equipment for both residential and industrial use.

Alexandria lies just across the Potomac River from Washington, D. C. and by virtue of its location is to be regarded as part of the greater metropolitan area of the nation's capital. Little manufacturing industry exists in the District itself, and the Alexandria area is consequently gaining steadily in the matter of industrialization. Since the war no fewer than 15 new plants have been added to this area, and of the 65 now in operation 4 are of very impressive size.

Future Development Indicated

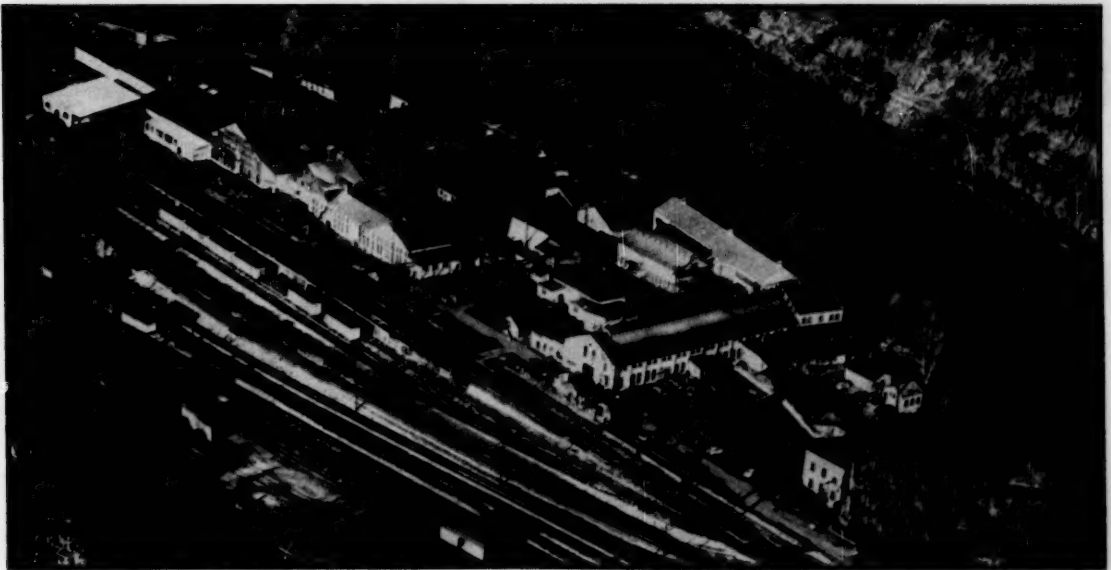
The foregoing make up the major industrial centers of the State of Virginia at the present time. It does not require supernatural vision, however, to see that other centers, now up-and-coming, are to be found in various parts of the state. In Alleghany County, for instance, the independent cities of Clifton Forge and Covington support a number of manufacturing establishments,

currently turning out products valued at more than \$75 million annually.

Of significant importance is Martinsville in Henry County, where manufactures valued at \$150 million per annum are being produced.

Other such centers are Hopewell and Prince George County, \$75 million annually; Bristol and Washington County, \$60 million; Buena Vista and Rockbridge County, \$55 million; Fredericksburg and Spottsylvania County, \$55 million; Harrisonburg and Rockbridge County, \$40 million; Winchester and Frederick County, \$30 million; and Radford and Montgomery County, \$30 million.

In all of Virginia's industrial centers, and especially in those that have their future ahead of them, adequate pools of cooperative labor await the vitalizing touch of Capital to turn their potential productivity into profit and prosperity.



Air view of the Glamorgan Pipe and Foundry Company plant located on the outskirts of Lynchburg.



Clinchfield Coal Corporation's rubber tired shuttle cars in operation at Moss Mine, Dickenson County, Virginia.

Minerals

VIRGINIA ranks twelfth among the states in mineral production. It has been estimated that the state has enough coal for 1,000 years. There are inexhaustible supplies of limestone and other minerals.

With over 50 minable seams, the Commonwealth boasts the best coal in the United States on the basis of quality and diversity of use. Annual production, which exceeds \$100 million, includes an excellent grade of coking coal, some of the finest steam coal in the world, metallurgical coal, domestic coal and by-product coal.

Of vast importance are thick beds of limestone and dolomite cropping out in extensive areas West of the Blue Ridge, where they are worked on a large scale and offer inexhaustible reserves of building stone, construction materials and raw materials for chemical industries.

Mineral resources and the products derived from them have played an increasingly important role in the history and economic development of Virginia.

More than 40 different industrial minerals have been found in Virginia, many of them in extensive deposits. Among those are abrasives (grindstone and millstone), arsenic, pyrite, barite, building and construction stone, cement, rock, clay, coal, copper, diatomite, feldspar, gem minerals, gold, granite, greenstone, gypsum, iron, lead and zinc limestone, and dolomite manganese, marble, marl, mica, ocher, phosphate, pyrite and pyrotite, quartz, salt, sand and gravel, sandstone, silica, slate, soapstone and talc, tin and titanium minerals.

From the standpoint of quantity and value, coal is the most important mineral in the state. The Southwestern plateau region, embracing 1850 square miles of land in the counties of Buchanan, Dickenson, Lee, Russell, Scott, Tazewell and Wise contains bituminous coal beds of the Pennsylvania age and yields the largest production and gives Virginia an important rank among coal producing states. In Tazewell County are the Pocahontas beds yielding one of the highest grades



Roofing slate used all over America in the yard at Buckingham-Virginia Slate Corp., at Richmond.

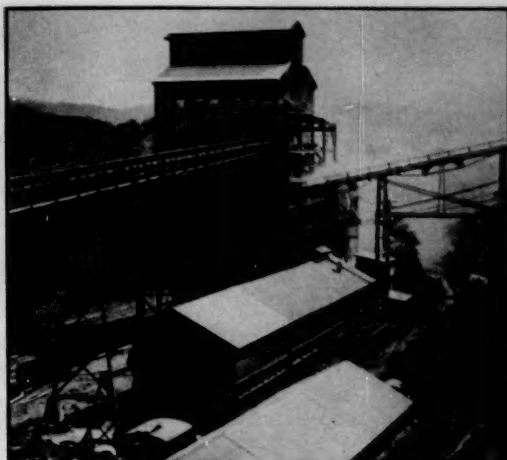
of coking and steam coal in the United States. The Valley coal beds of the Mississippian age are found on the West side of the great Valley in parts of Augusta, Bland, Botetourt, Montgomery, Pulaski, Roanoke, Rockingham, Smyth and Wythe Counties.

The Valley fields produce the only hard coal (anthracite group) that can compete with the anthracite coals of Pennsylvania.

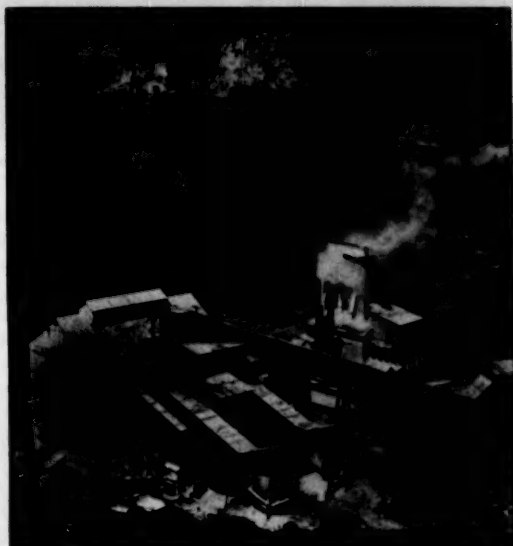
Barium sulphate used mainly in manufacture of lithopone (paint pigment); also from barium chemicals glass manufacture and fillers is to be found within the state. Barite has been produced, or appears to be a commercial grade in eight counties. Production has been from local deposits among the crystalline rocks of the Piedmont Province and some other deposits among the limestones in the Southwestern part of the Valley.

Bauxite, the ore of aluminum, was mined in Southern Augusta county during the war. Bentonite, a peculiar clay derived by decomposition of volcanic ash; used as bonding material for molding sand in oil well drilling mud and for sealing water leaks in engineering projects, is widely distributed in the Valley.

At the present time, vast quantities of manganese are being stock-piled by the government for later use in area near Lynchburg. With improvements in processing methods, it is expected that vast deposits of this



Blue Ridge Stone Corp. near Roanoke, produces materials for industry and railroads.



Liberty Limestone at Buchanan provides crushed and high grade limestone.



Aerial view of the Riverton Lime & Stone Corporation, Riverton, Virginia.



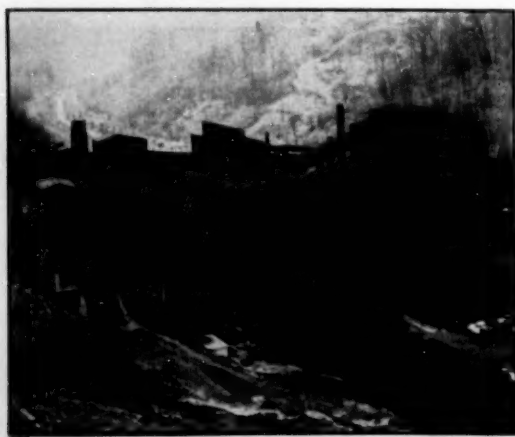
Olin Mathieson Chemical Corporation's Saltville plant, one of the world's largest carbon dioxide plants.

metal in Virginia will be mined. Manganese is essential in the manufacture of steel, dry batteries and various chemicals. It is frequently called an industrial "jack of all trades."

Numerous varieties of clay used in ceramic industries for manufacture of pottery, brick, tile and other products, are to be found throughout the state. Clay deposits are widespread. Sedimentary clays are interbedded with other strata in the coastal plain. Most of the clay in the rest of the state is residual. That in the Piedmont Province is generally red. Light-colored to white residual clay occupies an area in Amherst and Nelson counties. Similar clays are found above dolomite along the west foot of the Blue Ridge, particularly in the Shenandoah Valley.

The chief production of iron ore was from Oriskany limonite in Alleghany, Botetourt and Craig counties. This district apparently contains the largest ore reserves. Oriskany ore was mined on a smaller scale in several other counties where the Oriskany sandstone and the underlying limestones are well developed, and where geologic conditions were favorable for the concentration of iron in them. Considerable reserves of siliceous ore remain.

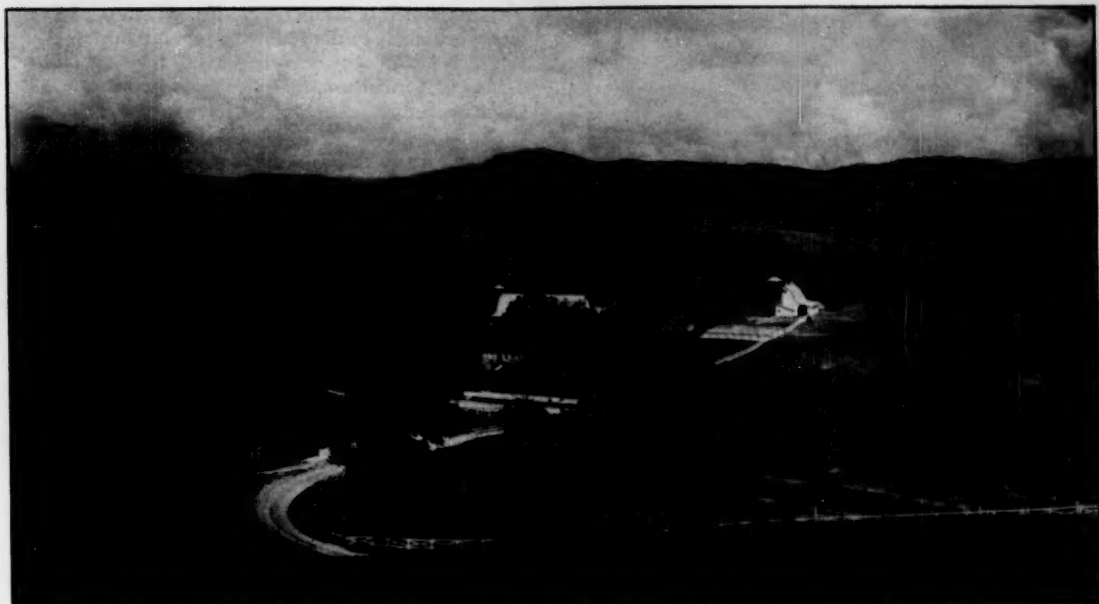
Since 1938, there has been a continuing increase in both the variety and value of the mineral resources produced in Virginia. In 1952, the last year for which information is now available, the total production of all minerals was valued at \$164,624,000 and coal at \$114,802,000.



Pocahontas Fuel Co.'s preparation plant, Pocahontas, Va., washes and sizes coal to meet industrial requirements.



Mine portal of No. 2 mine in Jewell Valley of the Jewell Ridge Coal Corp.



Fine dairy and beef cattle herds graze in pastureland heavy with blue grass, clover, and timothy near Wytheville.

Agriculture

OF fundamental importance during the past two decades has been the moderate shift of Virginia agriculture from the production of crops to the production of livestock and livestock products. From 1929 to 1950 livestock and livestock products' share of cash receipts from farm marketings increased from 44.2 to 50.3 per cent of the total as may be seen in Table 1. Inasmuch as relative prices between crops and livestock remained unchanged as between 1929 and 1950—each having risen by 20 per cent, the whole of this increased share can be attributed to a relative increase in the physical output of livestock and livestock products over and above the increase in the physical output of crops.

This relative shift towards livestock and livestock products in Virginia occurred during a period in which for the nation there was no such shift but for the South the shift was of much greater magnitude. Yet in 1950 Virginia still lagged behind the nation and led the South in the relative importance of livestock and livestock products in total cash receipts from farm marketings, its 50.3 per cent comparing with 56.3 per cent for the nation and 39.8 per cent for the South.

Poultry products, one of the components of livestock and livestock products, accounted for 18.5 per cent of Virginia's cash receipts from farm marketings in 1950 being relatively twice as important as in the nation and in the South. Dairy products accounted for 14.6 per cent of Virginia's cash receipts in 1950, thus being slightly more important in Virginia than in the nation, and almost double as important as in the South. However, cash receipts from meat products in Virginia though increasing substantially over the two decades still was only half as important as in the nation and about 20 per cent less important than in the South.

The enormous gains in the South in the output of meat products from 1929 to 1950 was the primary factor accounting for the large relative gain on the part of the South in livestock and livestock products.

Though cash receipts from the marketing of crops declined from 55.8 to 49.7 per cent of the total over the period from 1929 to 1950, cash receipts from the three leading crops, tobacco, peanuts, and corn increased as a per cent of the total from 16.6 per cent to 28.9 per cent. Tobacco alone accounted for 19.9 per cent of the cash receipts of Virginia farmers in 1950. From 1929 to 1950 the production of tobacco increased tremendously in relative importance in the South primarily because the demand for tobacco products expanded more rapidly than did the demand for most farm commodities but also because of favorable parity rates set for this commodity.

The Census of Population reports that there were 167,459 persons employed in agricultural pursuits in Virginia in April 1950. Included in this estimate are all farm workers who worked a greater number of hours in farming than in any other occupation and also



From hogs like these the famed Virginia hams are selected.



Apples are the leaders in fruit production and are grown mainly in the Blue Ridge, Piedmont, and Shenandoah Valley sections.

all unpaid family workers 14 years and older who worked 15 hours or more on a family farm during the census week. This is the estimate used in this report since this count more so than any other available makes possible the most satisfactory comparison between employment in agriculture and the other industries in the economy.

The Census of Agriculture, also taken in April 1950, gave an estimate of 220,699 for farm employment in

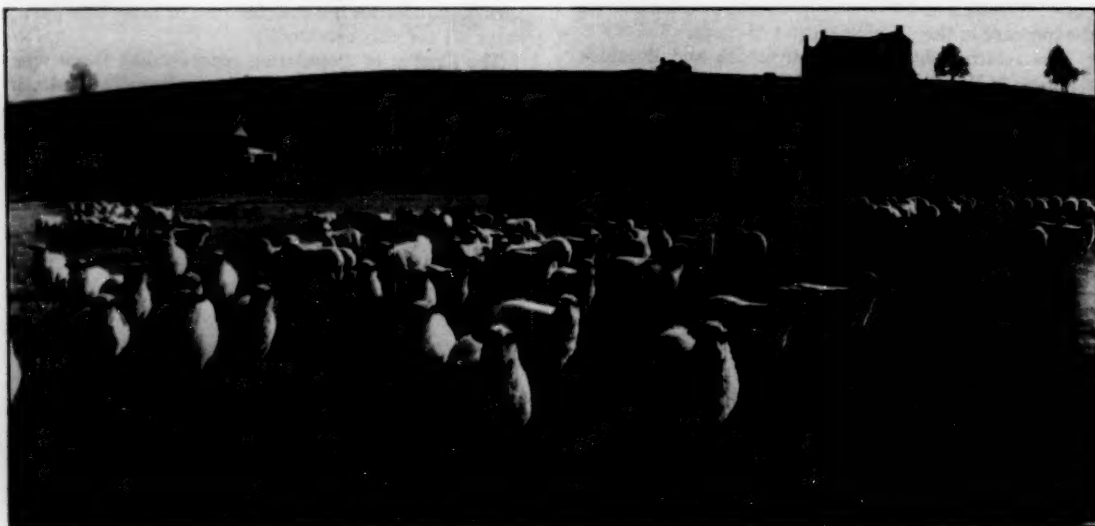
Virginia which is compared with the Census of Population estimates in the following tabulation:

<i>Census of Agriculture, 1950</i>	<i>Census of Population, 1950</i>
Farm operators ..110,525	Farmers and farm managers
Unpaid members of operator's family	102,057
65,390	Farm laborers and foremen
44,784	46,550
Hired workers ...	Farm laborers, unpaid family workers
220,699	16,066
Total	162,673

The relative decline in agricultural employment has been the most significant and clearly the most persistent of all employment trends for Virginia as well as for the nation. At the turn of the century roughly half of Virginia's gainfully employed were engaged in agricultural pursuits, as compared with 14.6 per cent in 1950. Similarly throughout the nation, agricultural employment has been declining in relative importance. This relative decline has been in operation since colonial times and is even now continuing.

Agricultural employment in the expanding economies of the nation and the state has been a steadily shrinking part of total employment because output per worker engaged in agriculture has been increasing more rapidly than has the demand for agricultural commodities.

The increasing use of electricity and motor-driven equipment on Virginia farms which has been taking place for 30 years accelerated after World War II. The Census of Agriculture reported 75.6 per cent of the Virginia farms using electricity in 1950. The number of farms using electricity and tractors approximately doubled from 1945 to 1950 despite a decline in the number of farms. These and other evidences of advancing technology indicate why the agricultural output of Virginia farms has increased even as the number of farm workers has declined.



A truly magnificent flock of sheep attest to the versatility of agriculture in the state.

Forest Products

VIRGINIA'S 15,832,000 acres of forest land are a source of raw material which supports an industry employing more than 20 percent of the industrial workers.

Of the 13,767,000 acres of forest land in private ownership, about 90 percent is in ownership tracts of less than 5,000 acres. It is from this ownership that a large majority of the raw forest material is purchased by industrial operators. The forests are spread widely throughout the state, as are the lumber, pulpwood, paper, veneer, cooperage, tie, piling, fishnet poles, excelsior, furniture and other forest industries.

According to a 1953 survey there are growing in the state 30,407,000 board feet of live saw timber of which 9,809,000 board feet are in softwoods, principally pine; 6,200,000 board feet in soft hardwoods, principally yellow poplar and gums; and 14,398,000 board feet in hardwoods such as oak, hickory, and others.

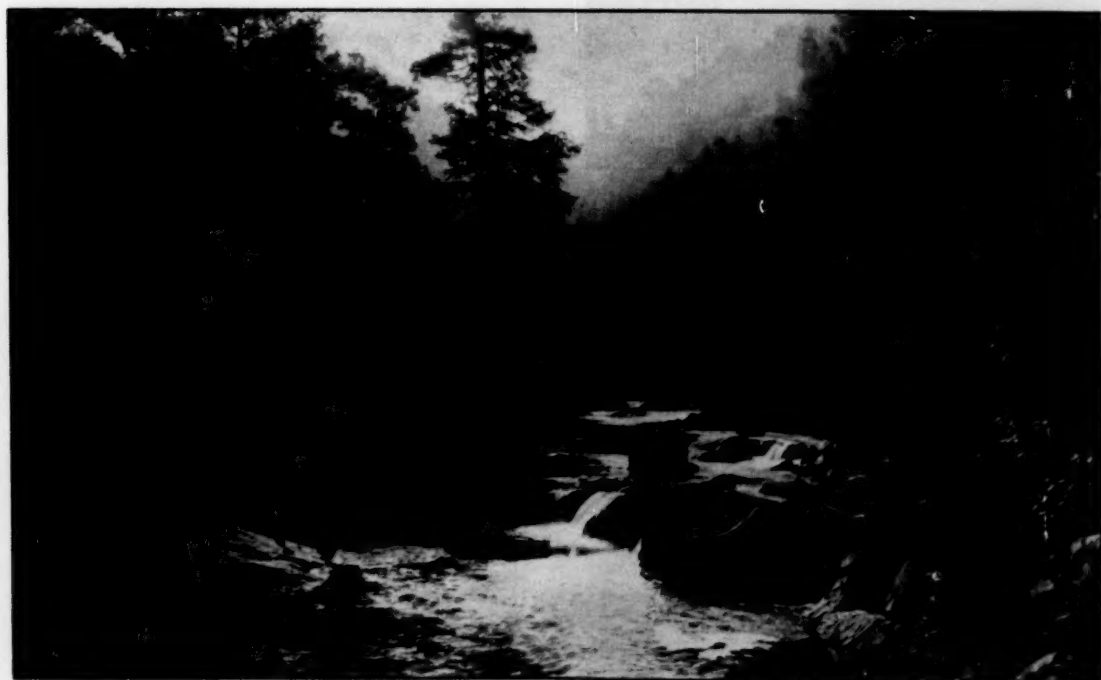
To fulfil its public responsibility in developing and protecting this immense widespread forest resource, the state, through its laws and finances, supports an active forestry program. The major activities of the program are forest fire prevention and suppression, timber management service to landowners, reforestation of idle and abandoned lands, and active educational activities in all branches of forestry.

The forest fire suppression record for Virginia is good. During the five-year period 1948-1952 the average annual burn was only 25 hundredths of one per cent of the forested area. This record was made possible

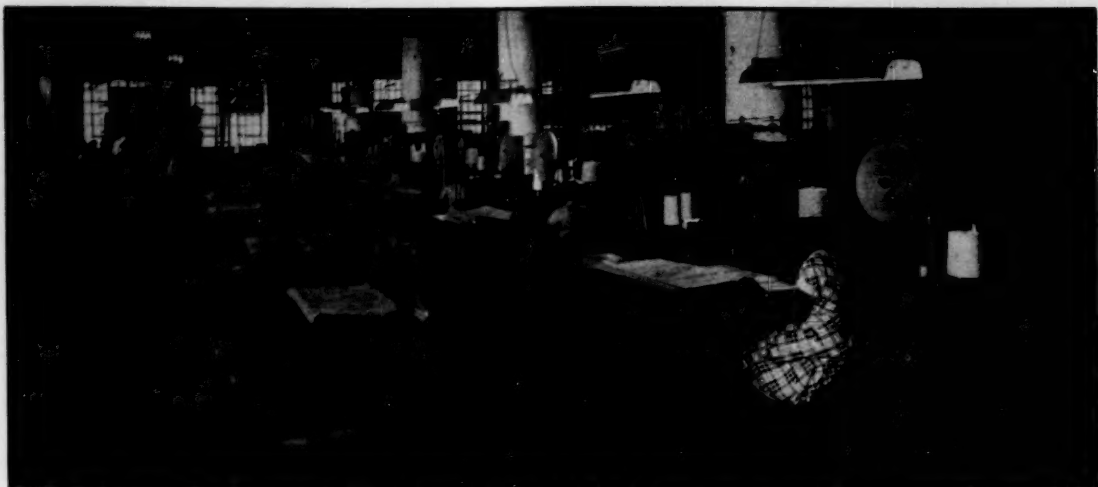
by the interest and cooperative spirit of the local citizens in keeping Virginia's forests green and productive.

In the timberland management service, at the request of a landowner, a technical forester will examine the woodland in question and make recommendations as to how best to handle the area. If harvesting is recommended, the forester will measure and mark those trees which should be cut. Where reforestation is recommended, the forester will assist the landowner in obtaining the correct quantity of species of forest tree seedlings necessary to restock the area. Some 2,000 landowners avail themselves of this service each year. The two state forest tree nurseries produced 16,000,000 seedlings for reforestation in Virginia during 1954. Virginia has vast unused hardwood forest resources.

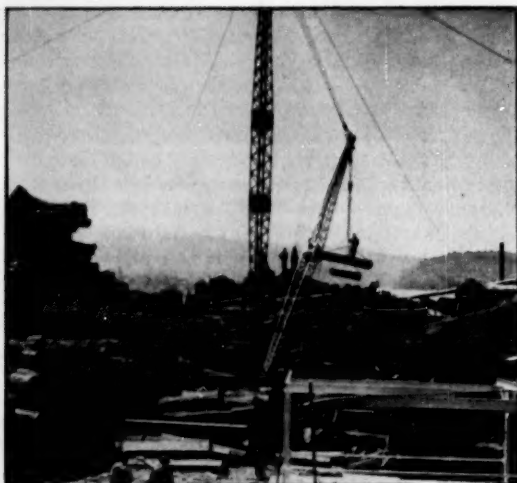
The Virginia Department of Conservation and Development has defined forestry products on timberlands as follows: A basic concept of forestry is to grow, harvest and reproduce the forest crop in such a manner that each forest acre will produce its maximum, merchantable, high-quality timber. Good forestry practices are used on all state-owned forest lands. On state forest areas 25 per cent of gross receipts are paid the county in which the tract is located in lieu of taxes. The total forest area of Virginia is divided into three main physiographic provinces—the Coastal Plain, Piedmont, and the Mountains. Within the Coastal Plain, the dominant forest types are the loblolly pine and bottomland hardwoods. In the Piedmont, the short-leaf pine and



Vast forest reserves assure a steady source of raw material for industry's needs.



Sewing line at Albemarle Paper Manufacturing Co., Richmond, multiwall bag division.



Many sawmills throughout the state start lumber on the way to the consumer.



Mortising sash parts at the plant of R. O. W. Distributors, Rocky Mount, Va.

Virginia pine types are most important; whereas, in the Mountains, the upland hardwood type is prevalent. This last type also occurs quite extensively throughout both the Piedmont and Coastal Plain. Other less extensive forest types are the white pine and the cove hardwoods of the Mountains. Potentially, Virginia's forest land is capable of supplying a much enlarged forest industry with a steady flow of high quality products. In order to insure a steady growth and to prevent depletion of the vast forest reserves, a concerted forestry effort is now being made, both by public agencies and private industries.

Two of these groups are the Virginia Forest Service and Virginia Forests, Inc. The former, through its program of fire protection, reforestation and management assistance, is working with the landowners of the state in an effort to provide them the service they require. The latter association, through its program of publicity, education and legislation, is cooperating with many organizations in an effort to provide an incentive to better forestry on the part of those same landowners.

It is due to the combined efforts of these two agencies, and with rival assistance from other groups, particularly the railroads, that much has been done to create a forestry consciousness on the part of all.



View of the dry end of a modern paper machine at West Virginia Pulp and Paper Co., Covington.

Commercial Fishing

THE fisheries industry has been a substantial source of income to many Virginians for many years. Seafood products in the Old Dominion are taken from the waters running along approximately 1300 miles of shoreline and from the lower Chesapeake Bay. In 1951, the latest year for which official estimates are available, better than 9,000 full-time and casual fishermen caught 266,000,000 pounds of fish and shellfish valued at about \$15,000,000. Fluctuation in the size and value of the catch from year to year is the rule rather than the exception. For example the largest catch since 1920 was in 1947 when the fishermen caught almost 523,500,000 pounds.

The importance of the fisheries cannot be overestimated. The first settlers that arrived along our shores found an abundance of fish and shellfish which saved many from starvation when agricultural crops failed. They were convinced that the supply was inexhaustible. As the country grew, exploitation of the fishies became more and more intense to satisfy the demand created by the growing population. Then as transportation improved distribution was extended throughout the United States. This normal expansion was coupled with waste as tons of less desirable fish were discarded for a few choice ones.

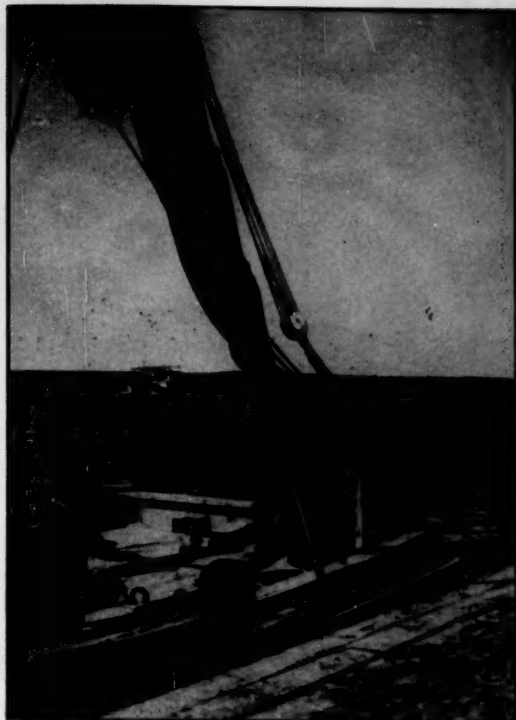
The population of the world is estimated to double in about every hundred years and as the population pressure increases, the use of land shifts from cattle to grains and an ever increasing demand for seafood to satisfy the demand for proteins. Intelligent marketing, conservation practices and new methods are essential so as to provide a profitable growing business. An example of a new product which has stimulated the sale of more abundant fish is the new and increasingly popular "fish-sticks."

Many varieties of both shellfish and finfish are available in the area. Ocean fishermen concentrate on mackerel, shad rock and croaker. Shellfish including oysters, crabs, clams and scallops are found in the lower Chesapeake Bay.

The principal packing and shipping point in Virginia has been Hampton. Most of the crabs—hard and soft shell—caught in the waters within or bordering Northumberland, Lancaster or Middlesex counties, are sold to "buy boats." This is the name given to the craft sent out by packers at Crisfield, Maryland.

Because of the natural advantages and supply of Chesapeake Bay oysters, crabs and clams and because of the superior flavor of these shellfish, they are able to compete successfully in a wide market. However the market for shellfish is relatively undeveloped. As quick freezing and packaging is further developed, Virginia's shellfish, with an adequate supply, may well exploit a much wider and more intensive market. Virginia's fresh shucked oysters, cooked crabmeat, soft crabs, shell oysters and hard clams are being introduced to inland and northern markets and their fame will spread.

The problem of providing ways and means for an expanded annual catch on an efficient basis and at the

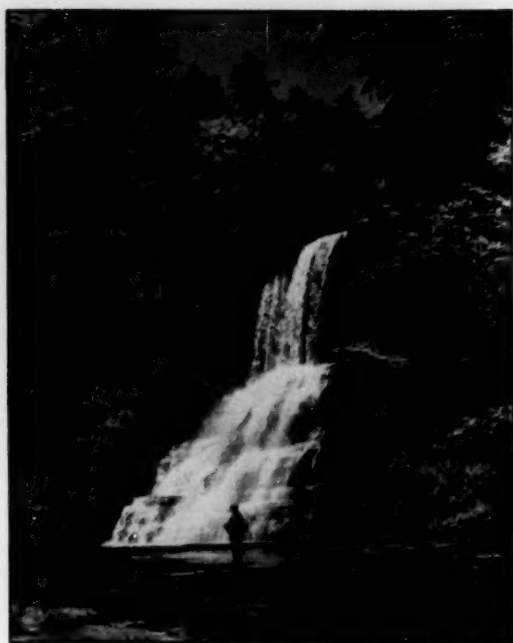


Returning to port with a full catch from Virginia's abundantly endowed waters.

same time of ensuring an adequate supply of shellfish in future years is constantly under study. It is a curious sociological, political and economic situation that the ancient and inefficient method of obtaining oysters by tonging is still used commercially today. In 1948 about 28,000 pounds per man came from dredging and about 3,000 pounds per man came from tonging. On grounds of economic efficiency, it would seem that practically all Virginia oystering should be done by the more efficient dredge, which is undergoing constant technical improvement. Indeed, the total cost of oyster production might be reduced sufficiently to allow a lower price to consumers, thus resulting in a larger and more profitable volume of sales for the industry.

Norfolk, Hampton and Phoebus have been the principal centers for the handling and preparation of fish for market. Practically all of the fish handled are sold fresh or frozen. Most of the oyster houses in the state are in the Northern Neck, on the Rappahannock and Great Wicomico Rivers, and on the Virginia tributaries of the Potomac, and at Chincoteague, Wills Wharf and Tangier. There are also several oyster houses in Norfolk, Portsmouth and at Hampton. The manufacture of poultry feed from oyster shells, and oyster shell lime, are important related industries.

In addition to providing food for immediate consumption, the fisheries of Virginia supply raw materials for a number of manufacturing activities. The menhaden, which is used in the manufacturing of scrap meal, and oil, is the basis of a large industry allied with commercial fishing.



Water

VIRGINIA has been well endowed by nature with large quantities of surface and ground water of varying chemical characteristics satisfactory to meeting the growing demands of industry. The runoff from about 43 per cent of the area of the state flows into springs which are entirely within its boundaries. From another 49 per cent of the area it drains into rivers which rise in Virginia and flow into other states. Rivers rising in other states carry off the water from the remaining 8 per cent of the area. During a year of normal rainfall, about two-thirds of Virginia's 42 inches of annual rainfall is evaporated or transpired. The balance or remainder of the rainfall supplies the run off, which feeds the surface drains, and ground water recharge, which supplies wells and springs. Due to the state's topography, streams come into existence in almost all areas of the Commonwealth, and flow into distinct rivers. Appreciable portions of the state form part of the watersheds of nine major rivers. The two largest of these are the 10,002 square miles in the James River basin, and the 6,295 square miles in the Roanoke River basin. The major river basins of the state are the Potomac, the Rappahannock, the York, the James, the headwaters of Chowan, the Roanoke, the New River, the headwaters of Big Sandy, and the headwaters of the Tennessee. In addition to these major river basins, there is a considerable area of the Tidewater section draining directly into the Chesapeake Bay or the Atlantic Ocean through small streams which do not empty into any one of the major river basins or major river systems.

There are sites throughout the state along the various rivers where many millions of gallons of water may

be obtained daily. There is an adequate supply of water from both surface and underground sources for normal industrial requirements. The information concerning surface waters is more nearly complete than for ground water. This is due to the fact that records on the flow and chemical character of surface waters have been kept over a longer period of time.

Ground water is very important to the entire state and vital to those localities in which no other water is available, or where the surface water is inadequate or unsatisfactory. It is estimated that the consumption of ground water per day in Virginia amounts to 296,000,000 gallons (industrial—200; rural—65; municipal—30; irrigation—1).

The first stream gaging station was established in Virginia in 1895. However, since 1928, when the full importance of stream flow investigation was recognized, there has been a gradual increase in the number of such stations, until today there are over 200 in operation. Records have been kept continuously at certain locations since 1899. At other points the records are of fairly recent origin. The study of surface water also includes a well planned sampling program of the chemical character of the waters. This program has been in operation for approximately 10 years. As a result, valuable information on the chemical content of the waters is available for existing and prospective industries. A well equipped laboratory is maintained at the Division of Water Resources, and a sampling process is under way to provide the information on the mineral content of the waters. During recent years, data have been collected on the suspended sediment carried in some of the Virginia streams.

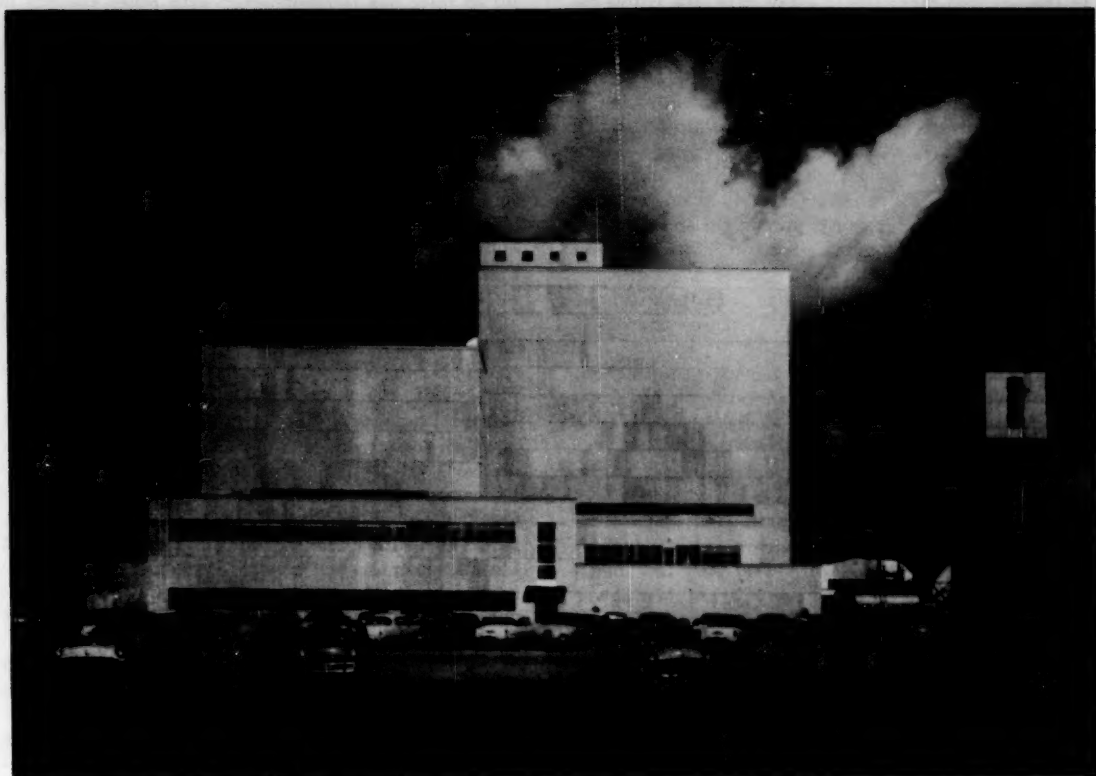
Major Storage Reservoirs of Virginia

During the summer of 1946 the Virginia Conservation Commission in cooperation with the U. S. Geological Survey made an effort to collect data describing the larger storage reservoirs in the state. The maximum utilization of the natural surface-water resources of the state depends in part upon the construction and operation of reservoirs to alleviate the damaging effects of extreme high and low stream flow.

The first large reservoir in Virginia, known successively as Flanagan Mills, Trice's Lake and Clearwater Lake, was constructed originally for power; most of the early reservoirs however were primarily navigation reservoirs.

Other earlier dams include Boshier Dam and Lynchburg Dam. Lake Drummond, a natural lake in the middle of the dismal swamp, was tapped with a feeder canal. Lake Drummond remained the largest reservoir in Virginia until 1939, when Clayton reservoir was completed. This dam was built by the Appalachian Electric Power Co. Other power dams include Blands Ford Dam, Emporia Dam, Halifax Dam and the Roanoke River Dam now being built by the Virginia Electric and Power Company.

The James River now has the capacity to handle ocean shipping with a channel dredged to a depth of 25 feet. It is now proposed that this channel be dredged to a depth of 35 feet which will handle the largest of modern tankers.



The Portsmouth Power Plant of the Virginia Electric and Power Co., newest in their system, went on steam January 1, 1935.

Power & Fuel

The power industry in Virginia is in the enviable position of having available for its use an unlimited supply of economic steam coal from the coal industry which has access to more coal seams than any other mining area in the United States. This, combined with ample supplies of condensing water, results in a lower production cost for electricity in Virginia than in many other states, and enables the power industry to produce electric power in quantities more than adequate for present and future industrial requirements.

The early history of power in Virginia is closely intertwined with that of the electric street railway business. The first successful operation of an electrically operated street railway was in 1888 in Richmond, and this may also be considered approximately the natal date of the electric light and power industry in the state. As the demand for light and power increased, the early supply came from small stations, widely scattered, whose primary load was electric lighting used mainly in the hours of darkness. This load factor permitted supply from small hydro stations which could utilize impounded water during these few hours, and re-

fill their storage reservoirs during the balance of the day. The early steam stations were also operated on similar schedules.

At this point the influence of water resources on the location of steam electric generating plants should be considered an influence that is not generally recognized. The modern large steam plant requires huge quantities of water for condensing purposes. One 60,000 kilowatt generating plant requires 65 million gallons of condensing water for each day, more than twice the average daily consumption of the city of Richmond. The condensing water is returned to the stream with no loss and a small rise in temperature.

The gradual displacement of hydro-power by steam stations in Virginia is evident when it is known that in 1949, steam plants had 81 per cent of the capacity and produced 81 per cent of the kilowatt hours, while hydro was 17 per cent in both cases. Production and capacity from internal combustion driven generation was 2 per cent. In general, hydro-generation in Virginia is best utilized if it can be integrated into systems whose base load is carried by steam generation and, as

in the original operation in early days, the entire capacity of hydro may be used on peak loads, occurring for several hours each day.

Interconnections at strategic points of the large systems now operating in Virginia permit the interchange of power between these systems to obtain additional sources of electricity, and to take full advantage of generation at lowest costs. All the privately owned systems in the state are now so interconnected at one or more points. The growth, capacity, production and load factor has been tremendous. Comparison shows the great increases, for with an increase of over five times the generating capacity in 1949 of that in 1920, the annual use of the installed capacity has increased from 2385 hours in 1920 to 4578 hours in 1949.

With the growth of industry and with the constant developments, inventions, and marketing of new electric appliances, the demand for electric power is on a steady, upward rise.

In Virginia, generating costs have declined as the capacities of steam plants have been more fully utilized, and as larger, more efficient generating units have come into use, rates for electric service compete advantageously with other sources of power. Very few industrial plants in Virginia generate any part of their power requirements, and those that do make "by products" power from process requirements in the plant.

Seven privately owned electric systems, the largest of which are the Virginia Electric & Power Co. and the Appalachian Electric Power Co., serve the major requirements of Virginia. As a result of interconnections to permit the exchange of power, these companies can perform adequate, dependable and economic electric service throughout the state.

Privately Owned Electric Systems in Virginia

As of 1951, the lines of the privately owned electric systems in Virginia extended into practically every county in the state. Wherever geographically possible these systems are interconnected with each other and

all of them are interconnected with other systems in neighboring states.

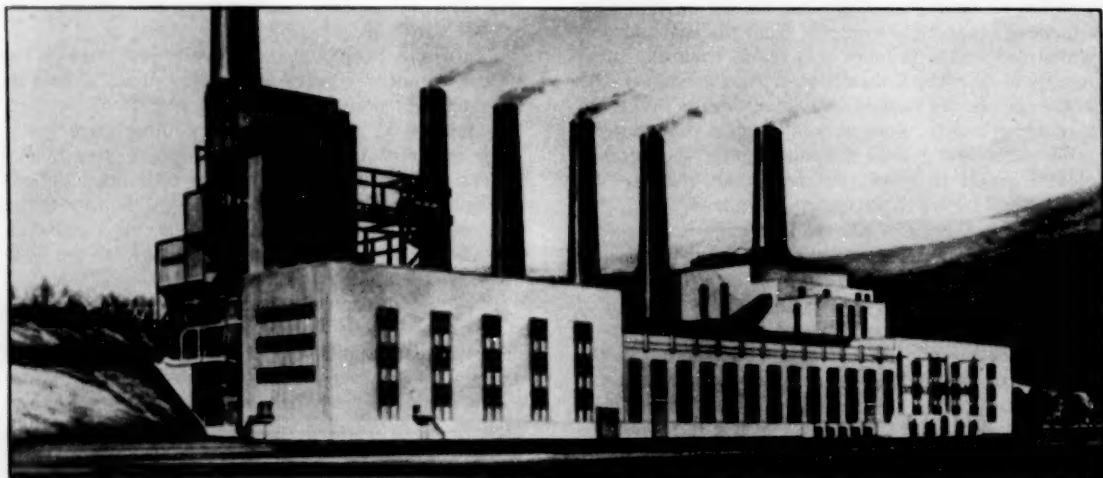
Appalachian Electric Power Company

The Appalachian Electric Power Company is part of a physically integrated group of six companies comprising the American Gas and Electric Company System, which extends from Virginia west through West Virginia, Kentucky, Tennessee and Ohio to Michigan and Indiana. The Appalachian Company itself operates in Virginia and West Virginia, and to a minor extent in Tennessee, and is the largest of the six companies.

The area served in Virginia includes nearly all the areas west of Lynchburg to the Tennessee, North Carolina, and West Virginia state lines. Principal cities and towns served include Roanoke, Lynchburg, Pulaski, Marion, Bluefield, Wytheville and Abingdon. The principal generating stations of this company in Virginia are hydro plants at Clayton and Byllesby and the Glen Lyn steam plant, but through the interconnected system it interchanges power with its plants in West Virginia, and with affiliated companies in other parts of the American Gas and Electric System. It has interconnections with the Virginia Electric and Power Company at two points in Virginia and at another in West Virginia.

Since 1950, Appalachian has expended over \$170 million on improvements and additions to its systems in Virginia and West Virginia. This continuing expansion program has included the new 400,000 kilowatt Kanawha River steam electric generating plant at Glasgow, West Virginia; the 600,000 kilowatt Philipsborn plant at Graham Station, West Virginia, which Appalachian owns jointly with a sister company, and there are many transmission and distribution facilities in the area.

In Virginia, the company has built 200 miles of transmission lines since 1950, and several large transmission stations including those at Roanoke, Wytheville, Cloverdale, Marion and Lynchburg. All of these new trans-



This is how Appalachian Electric Power Co.'s Glen Lyn plant will look upon completion of a new unit in late 1956.



Aerial view of the Riverton Power Station of the Northern Virginia Power Company located on the Shenandoah River just below Front Royal.

mission facilities have meant greater supplies of electricity for the western Virginia area, where this company serves such industries as textiles, furniture, cement, railroads, coal and a number of smaller industries. During 1955, the company planned an estimated construction budget of \$22 million, to be spent in western Virginia. About \$6½ million will be spent at the GlenLyn Virginia plant, where construction is under way on a new 225,000 kilowatt generating unit, which will virtually double the capacity of the plant when it is completed late in 1956. The completion of this unit will give Appalachian a system generating capability of over 1,700,000 kilowatts.

Eastern Shore Public Service Company Of Virginia

The Eastern Shore Public Service Company of Virginia is a wholly-owned subsidiary of the Delaware Power and Light Company, an interconnected system serving parts of Delaware, Maryland and Virginia. The Virginia Company serves in Accomack and Northampton Counties on the Eastern Shore, including part of the requirements of the Accomack Northampton Electric Co-operative.

The principal source of power for the company is the steam generating station of its Maryland affiliate at Vienna, Maryland, although four diesel plants are maintained for standby purposes.

Northern Virginia Power Company

The Northern Virginia Power Company, as the name implies, serves the northern part of the state. The major power-supplying generating station of this area is the big new Riverton Plant, located just outside of Front Royal. Electricity from this station, which has a capability of 39,000 kilowatts, plus power from several hydro stations, provides ample service for this rapidly growing area. Service insurance is provided by

a transmission line power-loop connecting major generating stations of the West Penn Electric System—"parent" organization of this Company. To help serve the many types of customers in this area of wide diversification of industry and agriculture, the Northern Virginia Power Co. maintains a staff of specialists, trained in the fields of industrial engineering, commercial engineering, area development and farming whose services are always available without charge.

Its principal generating station in Virginia is at Riverton, a steam plant. Interconnections are maintained with its affiliated companies, and with Virginia Electric and Power Company.

Old Dominion Power Company

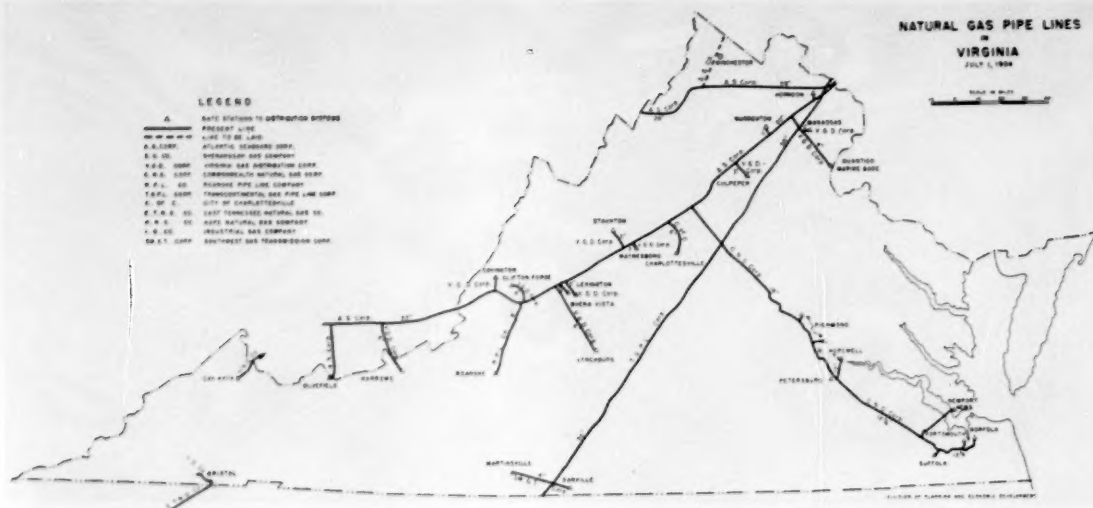
The Old Dominion Power Company, serving in Lee, Wise and Russell Counties, is a wholly-owned subsidiary of Kentucky Utilities Company with which system it is interconnected. It operates one steam plant in Virginia, and obtains its other requirements from its parent company.

Potomac Electric Power Company

The Potomac Electric Power Company, incorporated under the laws of the United States relating to the District of Columbia, also became a Virginia corporation in 1949 through merger of its wholly-owned subsidiary, Braddock Light and Power Company, Inc., which served a part of Arlington County. Its principal operations are in Washington, D. C., and vicinity and in serving this area it has constructed a steam plant in Virginia. A connection is available by which power may be sold to Virginia Electric and Power Company.

Virginia Electric and Power Company

The Virginia Electric and Power Company, an unaffiliated Virginia corporation, serves the greater part of



Virginia and parts of West Virginia and North Carolina, an area of approximately 29,700 square miles. It sells electric energy at retail in 997 communities and surrounding territories including Richmond, Norfolk, Portsmouth, Newport News, Alexandria, Petersburg, Charlottesville, Staunton, Suffolk, Fredericksburg, Hopewell, South Norfolk, Waynesboro, Clifton Forge, Covington, Hampton, and South Boston in Virginia. It also sells for resale to six municipal electric systems in Virginia and to the electric co-operatives in its service area. The company's facilities are interconnected and interconnections are maintained with all neighboring utility systems.

Principal steam generating stations are at Richmond, Chesterfield, Norfolk, Brems, Possum Point, Alexandria, and Hampton, with another under construction at Gilmerton. It owns or leases 16 hydro-electric stations in Virginia and one at Roanoke Rapids, North Carolina.

Vepco, as it is known throughout the state, will spend over \$53 million for new construction during the current year of 1955. Included in the 1955 construction budget is \$11,700,000 additional for the hydro development being built on the Roanoke River at Roanoke Rapids, North Carolina, and \$7,300,000 for the completion of a third generating unit at the Possum Point power station in Quantico, Virginia.

Improvements to the present electric and gas properties and the extension of electric and gas services to new customers will cost almost \$23 million, and \$3,800,000 to be expended for changes in the company's high voltage transmission network. During the past seven years Vepco has spent \$293,000,000 on construction and it is expected that in the years ahead large annual construction expenditures will continue as the need for improved and expanded service increases.

Appropriations for the Richmond-Petersburg area will include \$500,000 toward a storage repair and maintenance shop in Richmond, estimated to cost \$900,000 upon completion in 1956; \$250,000 toward a dust collector installation at the Chesterfield power station, total cost on completion in 1956 estimated at \$750,000.

In the Hampton Roads area, expenditures will include \$2,500,000 for completion of the addition to the Portsmouth power station, and \$500,000 for the installation of a heavy fuel oil system.

In Norfolk, Newport News and Hampton, where the company supplies natural gas, improvements and expansion of the gas system will cost approximately \$2,600,000. Other areas for expansion and construction of new facilities will be at Alexandria, Kerr Dam, Pamplin City, Charlottesville, Virginia, and their vast expansion in the North Carolina service area.

Natural Gas

In recent years several natural gas lines have been run across the state of Virginia, as shown on the map in this section, and natural gas for industrial purposes is available in many sections of the state. The companies serving the state are very anxious to develop a larger industrial load, and will cooperate with any industry where an extension is feasible.

Recently there has been discovered a very large supply of natural gas in the western part of the state, and today there are many wells that are producing commercial quantities of natural gas. Among the companies that are involved in the development and distribution of natural gas are: The Atlantic Seaboard Corporation, The Shenandoah Gas Company, the Virginia Gas Distribution Corporation, the Commonwealth Natural Gas Corporation, which serves several of the companies at wholesale, bringing natural gas into the state from the Southwest, The Roanoke Pipe Line Company, the Transcontinental Gas Pipe Line Corporation, the City of Charlottesville, The Tennessee Natural Gas Company, Hope Natural Gas Company, Industrial Gas Company, and the Southwest Gas Transmission Corporation. In the rich industrial district of Petersburg, Hopewell and Colonial Heights, the coming of natural gas has made it possible for the large chemical plants of that area to expand. The Petersburg-Hopewell Gas Company is serving this tremendous district.

Transportation

THE excellent transportation facilities offered throughout the state of Virginia give easy access to the markets and sources of raw materials. Virginia is located at "the top of the South," the junction point of the major rail transportation routes of the Southeastern United States. All freight moving north and south along the Southeastern seaboard must pass through the state. This rail service also extends East and West across the mountains to Cincinnati, Chicago, St. Louis, and other industrial and market centers of the midwest.

Crossroads of Major National Rail Routes

The Commonwealth is at the junction point of major rail transportation routes of the nation. Twenty-two railroad companies serve Virginia, 13 of which are Class One railroads and among these are some of the largest roads in the eastern part of the nation. Freight service reaches both north and south and across the mountains to Cincinnati, Chicago, St. Louis, and the other industrial and population centers of the Central West.

The east-west route handles an especially large volume of trade. Here the Norfolk and Western, the Chesapeake and Ohio, and the Virginian are the chief carriers of the heavy coal traffic which funnels into Hampton Roads, a port which shipped a larger volume of freight than any other United States port in 1951.

The Southern, the Richmond, Fredericksburg, and Potomac, the Seaboard Air Line, and the Atlantic Coast

Line combine to form the main north-south routes through the central part of the state. The Pennsylvania, running down the Eastern Shore, is connected by ferry with the Hampton Roads ports and the Norfolk and Western forms an important north-south link running through the valley region from Hagerstown, Maryland, to Bristol, Tennessee.

Most all areas of the state are adequately served by railroads, and Virginia with its more than 4,000 miles of railroad trackage averages 35 per cent more mileage per square mile than does the nation.

Double the National Average of Primary Highways Per Square Mile

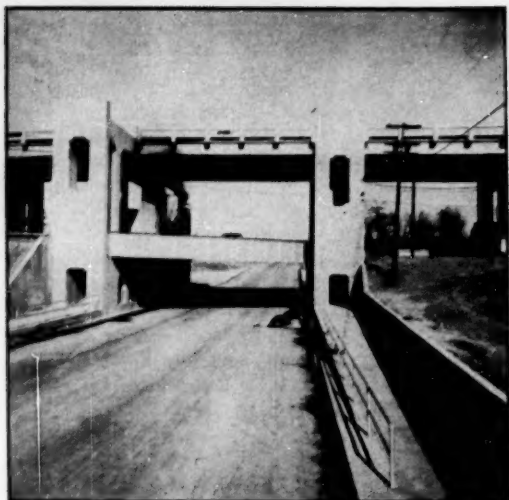
Virginia's 49,000 miles of primary and secondary highways constitute the second largest state-maintained system in the country and are a major factor in making plants convenient to both workers and materials.

The Commonwealth has 8,671 miles of primary highways, double the mileage per square mile averaged nationally. These arteries carry the trucks and buses which account for more than 20 per cent of the state's highway traffic. Crisscrossing truck routes, as shown by the accompanying map, penetrate into all areas of the state.

Seventy per cent of the primary highway system is approved to carry trucks with a maximum gross weight of 50,000 pounds (on four axles) and maximum



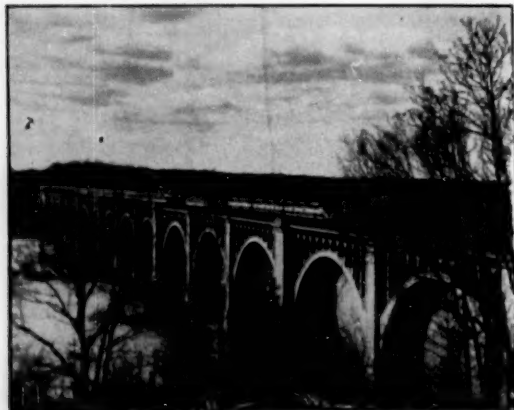
Norfolk and Western Railway train passing the pallsades near Pembroke. This vast system links the state with the Great Lakes.



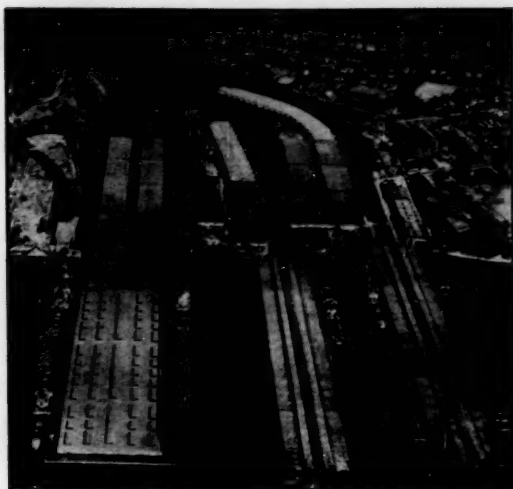
This three level intersection is an example of the modern highways that criss-cross the state.



Scenic, well maintained roads provide easy access to all parts of the state.



Atlantic Coast Line crossing the James River on the tracks of the Richmond, Fredericksburg and Potomac Line, the main line into the South.



Ships and rail meet at the Lamberts Point pier at the Port of Norfolk

axle weight of 18,000 pounds. The remaining 30 per cent of the state's primary highway mileage is approved for 35,000 pounds gross and 16,000 pounds axle loads.

Virginia spends 10 per cent more per mile for construction and maintenance of primary roads than the nation as a whole—this crude guide indicates that the Commonwealth's primary highways compare favorably in quality with those of other states.

Within 350 miles of Richmond, Virginia, lives one-third of the nation's population and almost any Virginia location is within overnight truck delivery of the large metropolitan areas of the East.

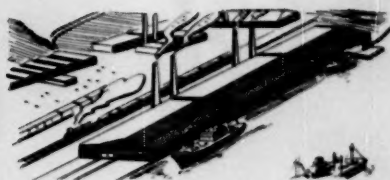
Excellent Air Service

Nine commercial air carriers, two of them exclusively freight lines, are certified to serve Virginia today. Richmond, Roanoke, Norfolk, Newport News, Hampton, Warwick, Lynchburg, Danville, Alexandria, and Bristol are on the schedule of one or more major trunk lines. The northern section of the state is well served through the Washington National Airport.



Many new bridges span Virginia's rivers and speed transportation throughout the state.

PORTS



THE Ports of Virginia, often considered the cradle of foreign commerce in the United States, because of their early prominence in Colonial times, are being turned to by more and more shippers as the answer to their transportation problems.

Last year, for example, the seven ports of the Old Dominion marked up a neat 10.9 per cent gain in import-export traffic as compared with 1953, according to figures compiled by the Virginia State Ports Authority from U. S. Department of Commerce statistics. The figures show that traffic in Virginia ports increased from 16,425,475 short tons in 1953 to 18,209,183 in 1954. During the same period the United States as a whole dropped seven-tenths of one per cent below the 199,223,000 tons registered in 1953.

Most of the gain, of course, was noted at the four ports which combine to make up the world famed shipping center of Hampton Roads—Newport News, Norfolk, Portsmouth and South Norfolk. But each of the state's three river ports—Alexandria, across the Potomac River from the nation's capital, and Hopewell and Richmond above Newport News on the James River—made substantial increases in the amount and types of tonnages they handled.

There are many reasons why the Ports of Virginia handled an increasing amount of cargo during 1954, among which include: (1) A stable and peaceful labor force; (2) excellent and ample modern facilities; (3) advantageous overland freight rates; (4) frequent sailings to and from all major world ports; and (4) efficient and economical cargo handling.

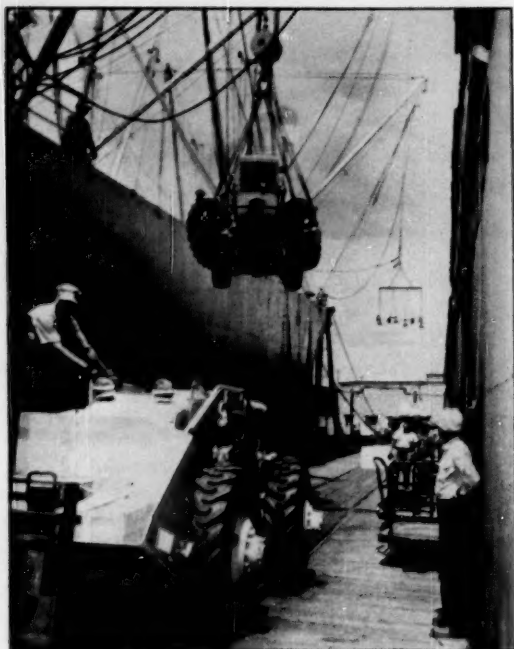
Another key factor in the rising popularity of Virginia ports is the close cooperation between and the careful coordination of planning and efforts by private interests and the Virginia State Ports Authority, an agency created by the General Assembly in 1952 to help promote the economy of the Commonwealth through its ports. By combining their efforts and plans, these groups have created a formidable tool to be used in serving the shipper by improving the services and facilities he needs.

Perhaps the most singularly important step forward taken at Virginia ports last year was the decision of the Ports Authority to establish an office in Europe. The office, to be opened in Brussels this summer, is believed to be the first full-time, private office ever established on the Continent by an American port.

Serving as Director of Commerce and Public Rela-

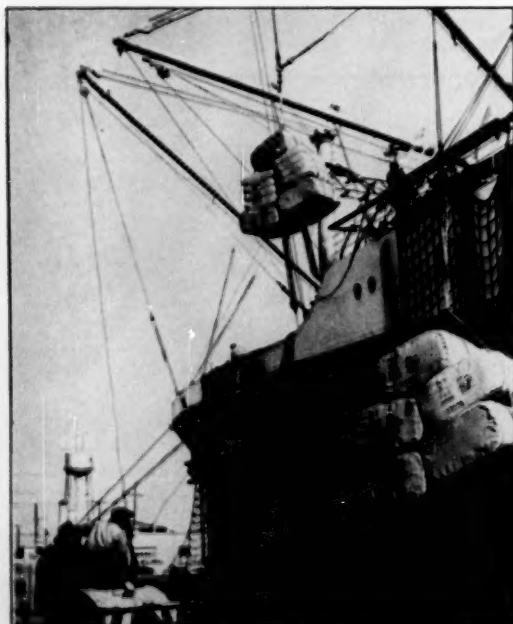


Rail classification yards and Lamberts Point Piers of Norfolk and Western Railway Co. in Norfolk. These merchandise piers serve the entire state and beyond.



Roadbuilding equipment beginning its sea voyage aboard the SS Mermacwave in Newport News.

tions in the European office will be William Leslie Schultz, an American citizen and a former Continental Freight Manager for the United States Lines. Schultz's duties have been described by Admiral David H. Clark,



First cargo boards SS Escaliber, which inaugurated "Four Aces" express service from Hampton Roads to the Mediterranean.

executive director of the Ports Authority, as that of acquainting European shippers with the many advantages to be found at Virginia ports. He will do little, if any, direct solicitation.

Other events which took place in the Ports of Virginia during the last year include:

Item: A decision by the Chesapeake and Ohio Railway to build an \$8,300,000 ore pier near its general cargo and specialty piers in Newport News. The pier, to be on the site of old Coal Pier 9, is expected to be in operation by July, 1956.

It will jut 711 feet into the James River and will have an unloading capacity of a ton a second. Its equipment is to include three bucket-cranes, a conveyor belt, and an on-shore loading tippie, from which four gondolas will be loaded simultaneously. The gondolas will enter and leave the tippie by gravity.

Item: Construction is advancing rapidly on the 65,000-barrel oil refinery of the American Oil Company on the York River near Newport News. The \$30-35,000,000 plant, the first of its kind to be constructed in the area, is scheduled for completion early in 1957.

Item: Other oil companies began, or announced plans for beginning, bulk residual storage facilities in the Hampton Roads area. The companies include the Atlantic Refining, Sun Oil, Phillips Petroleum, and Esso. They will bring to a baker's dozen the number of bulk terminals flanking the roadstead.

The new Esso terminal—its second on Hampton Roads—is located in Newport News, and includes equipment for supplying ships with their various fuel and lubricating needs while they take on coal from the C & O's coal piers. The new service will alleviate the need for bunkering from barges or moving to a bunkering station.

Item: The export of grain from Hampton Roads received a big boost early in 1954 when the Continental Grain Company's elevators were more than doubled in size, from 750,000 to 2,000,000 bushels. A later improvement occurred early this year when a \$500,000 marine leg was put into operation.

Item: At least seven steamship companies, each offering frequent sailings, offered new services through Hampton Roads. They include:

- (1) American Export Lines; fortnightly "Four Aces" express to the Mediterranean.
- (2) Alcoa Steamship Company; bi-weekly express service to east and west coasts of Venezuela.
- (3) Campagnie de Transports Oceanique (C.T.O.); monthly service to the Far East.
- (4) Grace Line; to Panama and west coast of South America.
- (5) Spanish Line; inbound from Cuba, outbound to Spain.
- (6) Virginia Trading and Shipping Corporation; monthly service to the Caribbean and Central America.
- (7) Buccaneer Line; service to Caribbean and Central America.



A portion of the labor supply for Virginia industry comes from owners of farms. This factor contributes toward the stability of labor because they supplement their earnings with income from farms.

Labor Supply

VIRGINIA occupies a most enviable position with regard to its present and potential labor supply, and because of its generally stable labor conditions its present labor force is adequate for its current needs, and is a young and expanding force. The men and women that make up this all important pool are, for the most part, native born, loyal Americans, who believe in a fair day's work for a fair day's pay. This is borne out by the excellence of the labor relations record in the state over the years, a record that is not equaled by many other states. There is ample evidence that the labor population is easily trained and readily adaptable.

Because of a favorable age distribution at the present time, Virginia is having a larger proportion of its population enter, and a smaller proportion leave, the labor force than the nation—the excess of young people entering the labor force over and above those retiring will, therefore, increase the state's labor supply by more than 200,000 in this present decade. In addition to this natural growth, there are a substantial number of low-income farmers—an estimated 31,000—who would move into industrial jobs should they develop. Many women not now in the labor force would take employment if there were job opportunities in their communities. This has been strongly proven by the wartime experience, and by the enthusiastic response demonstrated in many of the state's rural areas, where manufacturing and service establishments have recently made their entrance. The size of this pool of female workers, most of them living in Virginia's rural areas, is estimated to be in excess of 60,000. Add to these totals

the 10,000 young men and the 4,000 young women in the state who will be ready to take jobs each year as they complete their education, and the fairly large number of idle workers now available, largely because of the dislocations that have occurred with the conversion from the wartime to peacetime economy, and it is easy to understand why those people who are engaged in the work of attracting industry to the state are so enthused about this major attraction that they have to offer potential industrial citizens.

Virginia's labor population, present and potential, is younger in age than that of the nation—27.9 years is the median age in this state, as compared with 30.6 years for the nation. This, of course, results in a more youthful labor force, more flexible and better able to adjust to changing work opportunities. The white labor force is largely homogeneous and has been native to the state for generations. Although sufficiently mobile if the occasion arises there is a distinct feeling of attachment to the home and locality on the part of most Virginians, and this tends toward stability of employment. Many semi-rural and small Virginia towns offer adequate locations and adequate labor supply, coupled with the freedom of congestion, and excessive competition by other employers for available labor.

Manufacturing enterprises searching for new industrial locations are interested not only in the size of the potential labor force, but also in the abilities and the attitudes of that labor towards work, and in the wage rates at which they are willing to work. Many new firms locating in Virginia in recent years have testified

as to their success in training Virginia workers. Recent case studies made of two industrial plants locating in rural areas of Virginia showed the following: Most of the people employed in these plants were rural people, who had been born within 30 or 40 miles of the plants. It was found that "these plants were able to train the employees in relatively short period of time to perform satisfactorily most of the semi-skilled and skilled tasks in their operations. In this connection it was found that there was a definite tendency for the comparatively young employees to dominate the semi-skilled and skilled classifications. This is perhaps a natural thing—the importance of the observation is that Virginia's labor force is, generally speaking, a young labor force. Manufacturing employment in the state is divided among leading industries as follows:

Textiles

In 1950 the textile industry in Virginia with 37,175 employees led all other manufacturing categories in employment. This constituted 16.8 per cent of Virginia's manufacturing employment and in terms of manufacturing employment made textiles twice as important in Virginia as in the United States.

Chemicals

The chemical industry with 33,710 employees was the second largest employer of manufacturing labor in Virginia in 1950. Approximately four times as large a proportion of Virginia's manufacturing employment was in chemicals as was the case for the nation.

As with textiles, Virginia's chemical industry is dominated by one particular category—the synthetic fibres. The synthetic fibres constitute only one-ninth of the employment of the chemical industries in the nation, but they account for roughly two-thirds of Virginia's employment in chemicals. One out of every ten manufacturing employees in Virginia is engaged in this industry.

Lumber Products

The lumber industry ranked third in importance in Virginia in 1950 with 14.3 per cent of the state's manufacturing labor force.



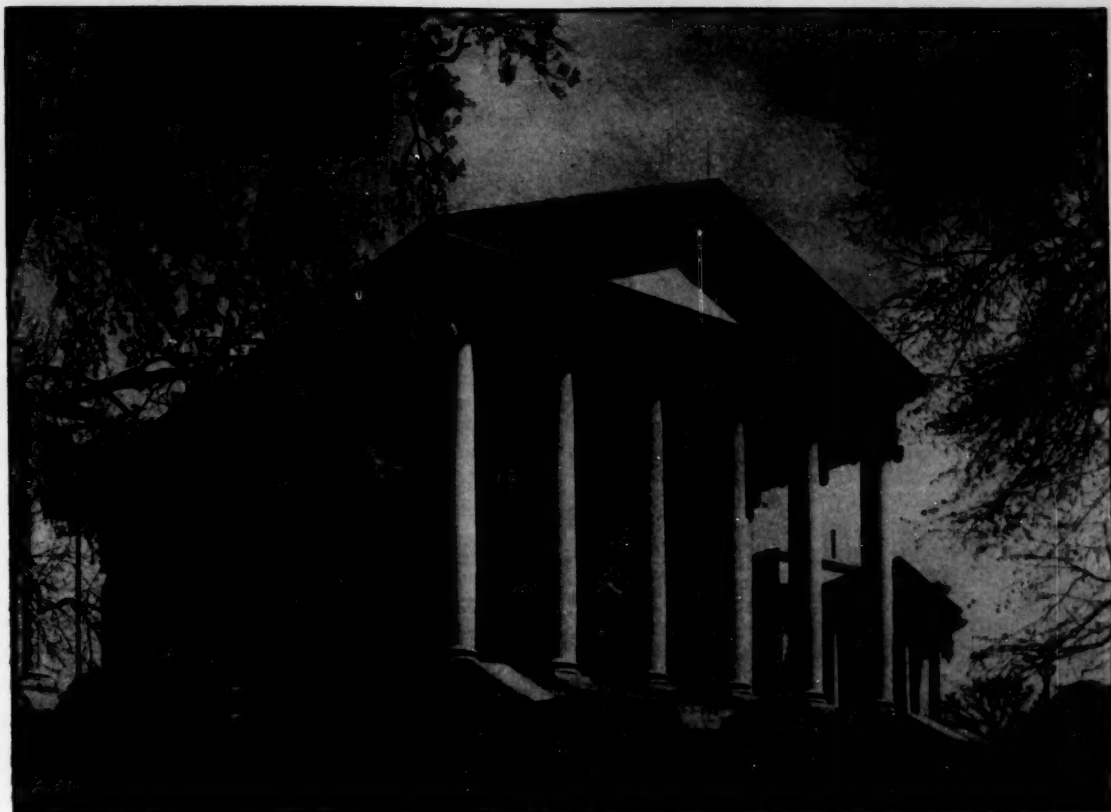
Tank cars being overhauled in the repair shops of The Interstate Tank Car Corp. at Portsmouth.

During the past half century the lumber industry has always been one of the principal, and frequently the leading source of manufacturing employment in Virginia. Employment in lumber products, though remaining as one of the principal sources of employment for Virginians, fell absolutely and relative to other employments during the twenties and the thirties. In 1939 it was in third place as a source of employment. It maintained this rank in the 1947 Census of Manufactures, at which time there were 23,268 persons employed in the industry. From 1947 to 1950, with the tremendous demand for lumber products, particularly for use in construction, employment rose to 31,810, an increase of 37 per cent and larger than the rate of increase experienced in any other industrial category.

With respect to wages, exhaustive studies have indicated that in almost every line of employment for which an average annual earnings per worker in Virginia and in the nation could be computed, average earnings per worker were substantially lower in Virginia than in the nation. The implications of this differential and the reasons for it are far too involved to be gone into here. Suffice it to say that the differential may be divided into two parts, the part due to lower average annual earnings per worker in specific homogeneous industries, and the part due to heavier weighting in Virginia of the industries that are typified by low average earnings per worker throughout the nation. In thinking of these differences, consideration must be given to a multiplicity of factors, including smaller communities, lower cost of living, surplus of agricultural labor supply, the lower earnings of the negroes, differences in degree of skill, productivity, etc.

With regard to labor relations and the excellent record that Virginia has built up in this particular, it is interesting to note that Virginia's work stoppage ratio is only half the national average. The state has 2 per cent of the nation's working force, but during the past several years accounted for only 1 per cent of the time lost from work stoppages.

Virginia's fair and equitable labor laws have long been conducive to harmonious relationships between management and its employees. A great deal of national publicity has been accorded Virginia's right-to-work law, which the United States Supreme Court has upheld as being absolutely and completely constitutional. The 7 and 2 decision of the Supreme Court was, in reality, an 8 to 1 decision, because Justice Douglas' opinion did not dissent as to the constitutionality of the law; it differed on the question of whether or not the Virginia courts had based their injunction on sufficient evidence that peaceful picketing demonstrated its potential effectiveness to keep non-union workers from retaining employment. The other seven justices agreed that in the particular case picketing was part of a maneuver to force the employer to hire only union help and to engage sub-contractors who hired only union help, thereby depriving employers of the right to hire and fellow-workers of the right to work. The importance of this decision is that it gives the stamp of constitutionality to the Virginia law which says that neither membership in the union nor non-membership in a union shall be a condition of employment.



Virginia's State Capitol at Richmond, designed by Thomas Jefferson, was completed in 1792.

Taxes and Legislation

THE Virginia State Government and most of the local governments have been unusually stable and have not enacted legislation of any kind which might obstruct industrial development and operation. Although the Virginia General Assembly has not provided for special tax concessions to new industries, both state and local governments by legislation and ordinance have demonstrated genuine interest in encouraging new industries of the right type to come to Virginia and in helping them to prosper once they have located here.

Relatively Low State and Local Taxes and Tax Refunds

Under the Virginia Constitution, only the local governments can levy taxes on real estate, tangible personal property, machinery and tools, merchants' capital, and the physical property of public service corporations. The rates applicable to the several classes of property vary in the different localities but the real property true tax rates of Virginia cities, towns, and counties are usually well below the average for the country as a whole. Among all the states Virginia enjoyed in 1952 the seventh lowest average true rate on rural property. It has occupied this or a more favora-

ble position for a quarter of a century. Municipal property tax rates in Virginia range, on the average, from about one-third to one-half the rates for comparable cities elsewhere in the United States. Moreover, the local tax rate on machinery and tools used in a manufacturing or mining business is even lower than on real estate in a number of localities.

The two largest taxes paid by manufacturing corporations to the state are the corporation net income tax and the business capital tax. Virginia's corporation net income tax rate of 5 per cent was reduced to an effective rate of 4.0 per cent in 1951, to 4.55 per cent in 1952, and to 4.7 per cent in 1953 due to a state law which provides for a credit on both individual and corporation income taxes when general fund revenues of the state during any one fiscal year exceed estimated general fund revenues for that year by at least five per cent of the amount estimated to be received from income taxes during the next ensuing fiscal year of the state.

The business capital tax is imposed at a rate of 75 cents per \$100. Capital includes inventories of stock on hand, money on hand and on deposit, the excess of bills and accounts receivable over bills and accounts payable, and all other tangible personal property not

otherwise specifically taxed or specifically exempt from taxation. Capital does not include real estate, machinery and tools used in a manufacturing or mining business, or the tangible personal property used in some 26 specifically enumerated businesses.

Virginia is one of 17 states without a general sales or gross receipts tax. This constitutes the major source of tax revenue for the 48 states as a whole. Under Virginia law, the localities are prohibited from levying either a local income tax or a local payroll tax.

Efficient Administration

Both state and local governments in Virginia, in spite of their relatively low taxes, have been administered with a sufficient degree of economy and efficiency to make possible public services of a high quality. All but one of Virginia's 32 independent cities and many of its incorporated towns have the city-manager form of government and several counties have the county-manager or county-executive form. Furthermore, local governmental units in Virginia are, in most cases, large enough to operate efficiently. Virginia has fewer local governmental units per 1,000 population than any state in the nation. While there is always room for improvement, taxpayers tend to get their money's worth in governmental services.

Low Government Debt

The almost complete absence of state debt and the relatively low debts of local governments mean that Virginia industries can be assured that their taxes will be used to provide current services instead of paying for "dead horses," and that if emergency services must be provided, Virginia governments have sufficiently good credit standing to borrow the needed funds.

Laws to Protect Labor and Management

Virginia's right-to-work law provides "that the right of persons to work shall not be denied or abridged on account of membership or nonmembership in any labor union or labor organization." Another law pertaining to picketing provides that "No persons shall engage in picketing by force or violence, or picket alone or in concert with others in such manner as to obstruct or interfere with free use of public streets, sidewalks or other public ways."

Laws to Promote Effective Use of Water Resources

The State Water Control Board, established in 1946, has been strikingly successful in preventing new or additional pollution and in abating existing pollution of Virginia waters, thereby increasing the quantity and the quality of the water available for industrial users.

The Virginia state government averaged an expenditure of \$5.49 per \$100 of residence income for the three-year period 1950 to 1952. This was almost identical with the \$5.48 averaged for the 48 states. Data as to expenditures by localities are not available by states. However, Virginia's combined state-local tax receipts

per 100 of residence income—which should approximate expenditures—is one of the lowest in the nation, with only three states ranking lower.

Expenditures for Public Schools

Education ranked as Virginia's largest combined state and local expenditure in 1952. Roughly, two-thirds of the Virginia state government's education expenditure went for public schools, and one-third for higher education. State appropriations, small as compared with these two, were also made for the state library, state museum of fine arts, and other agencies classified under education by the U. S. Bureau of Census. Virginia averaged an expenditure as a per cent of income payments equal to the average for the 48 states, while back in 1940 it had been 18 per cent below, a marked increase indicative of the progress made in all branches of state affairs.

Expenditures for Higher Education

The U. S. Bureau of the Census reported for 1951 and 1952, expenditures for higher education per \$100 of income payment higher in Virginia than in the nation. This happened even though Virginia had fewer students enrolled in state controlled colleges and universities per 1,000 population than was the case in the nation. The expenditures reported excluded outlays for medical hospitals associated with such institutions and for agricultural experiment stations and extension services, but included total expenditures for educational and general activities, commercial activities and capital expansions. Marked differences between Virginia and the 48 states were reported with respect to both expenditures and sources of income for each of these three components.

Expenditures for Highways

State localities spend funds for highways, rural roads and urban streets. Thirteen per cent of the total Virginia expenditure is for urban streets. A 32 per cent smaller proportion than the nation, but not unexpected, inasmuch as Virginia is less urbanized by approximately this same degree. Virginia's combined expenditure for state and municipal highways and rural roads of \$1.85 per \$100 of income payments during the five-year period 1947 to 1951, exceeded the national average by 30 per cent. However, on a per capita basis, Virginia's highway and road expenditure for the same period was almost identical to the \$20 per capita expenditure averaged nationally.

In recent years 58 per cent of highway and road expenditures in Virginia have gone for capital improvements. Approximately the same proportion as in the nation. State administered highways and rural roads have been financed largely from revenues on highway users. Motor fuel taxes alone during the five-year period 1947 to 1951, yielded 65 per cent of Virginia's highway and road revenue as compared with 46 per cent for the nation. Per capita consumption of gasoline in Virginia has equaled the national rate. Approximately 17 per cent of Virginia's highway and road revenue is derived from vehicle licensing tax receipts.

Banks and Insurance

RICHMOND, Virginia is the headquarters of the Fifth District of the Federal Reserve System. Transactions of this bank are directly related to the industrial and financial activity of the area.

November, 1954, marked the fortieth anniversary of the establishment of the Federal Reserve Bank of Richmond.

Banking operations at Richmond in 1954 included: checks handled, 181,244, amounting to \$72,439,038; transfer of funds to member banks at Richmond, 58,355, amounting to \$20,554,892,539.

Government securities (exclusive of savings bonds) issued, exchanged and redeemed during 1954 amounted to 77,074 or a total value of \$1,906,007,316.

During 1954 the following banks became member banks, significant of the expansion of finance in the Old Dominion: The Bank of Clarke County, Berryville, Virginia; the Guaranty Bank and Trust Company of Huntington, West Virginia, converted to a national bank under the name of the Guaranty National Bank and simultaneously entered the system; The Bank of Virginia, with offices in Richmond, Roanoke, Norfolk, Portsmouth, Newport News and Petersburg became a state member.

Member banks in Virginia for 1954 showed total assets of \$2,325,100,000 and numbered 205 national banks, an increase of 74 since December 1947.

Total state and municipal bonds offered during 1954 in Virginia were 40 issues valued at \$168,408,000.

Insurance

The growth of life insurance in force is indicative of the growth, wealth, and stability of the people.

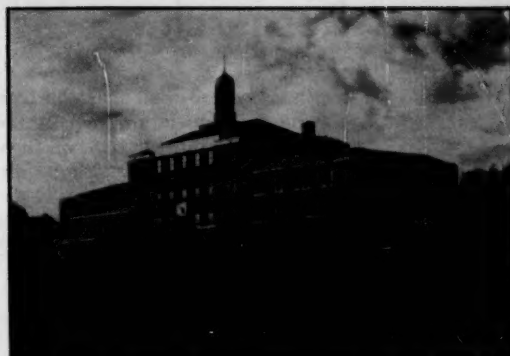
Life insurance in force in Virginia in 1953 in the following categories amounted to: Ordinary—1,330,000 policies valued at \$3,229,000,000; Group—594,000 certificates, amounting to \$1,054,000,000; Industrial—3,544 policies, valued at \$1,011,000,000; of a total amount of 5,468 policies or certificates, amounting to \$5,294,000,000.

This tremendous total amount of insurance in force represents \$4,600 per Virginia family.

Ownership of life insurance increased in all sections of the country in 1953, as it has over the past fifteen years, the regional pattern of growth being a reflection of local population increases and industrial development. In the past decade the greatest gains in life insurance have been reported in the South, Southwest and West, where the greatest industrial development and population increases have occurred.

About 70 per cent of the life insurance in force in U. S. life insurance companies is participating; 30 per cent non-participating. About 65 per cent of the total is with mutual life insurance companies; 35 per cent with stock life insurance companies.

In 1953 death benefit payments made in Virginia totaled \$32,908,000. Other benefit payments in Virginia



Home office Building of the Shenandoah Life Insurance Co., Inc. at Roanoke.

amounted to approximately \$31,000,000 or a total of about \$64,000,000.

In 1952, the latest date for which figures are available, Virginia insurance companies held mortgages valued at \$608,820,000.

Insurance companies in Virginia include the Life Insurance Company of Virginia, the South's oldest company; the Shenandoah Life Insurance Company, Inc., organized by citizens of Roanoke in December 1914, and now operating 22 branches in the several states in which it is licensed to do business; Virginia Fire & Marine Insurance; Virginia Mutual Insurance Co.; Richmond Life Insurance Co., Inc.; and many others throughout the state.

Finance and Industry

The chief advantage accruing to Virginians through the important financial changes lies in the relationship between finance and industrial expansion. In consideration of the state's avowed intention of further expanding industrial facilities in order to bring about more perfect economic balance, the important pools of financial resources that have been accumulated within the depositories of financial institutions, constitute an asset of prime value to enable Virginia to attract new industry and to encourage the expansion of existing industry. Where hitherto it has been necessary to go into the money marts of other sections for the sinews of capital investment, frequently at exorbitant cost, Virginia industrialists as well as others who have looked upon the state's opportunities and found them alluring, can count on an abundance of capital near at hand, available at economic rates.

All in all, the soundness of the state's financial position must be considered as one of the greatest elements of the progress that has been made during the past decade. And this, coupled with the rich soil of Virginia and the boundless hidden treasures that lie beneath—the basis of her wealth and well-being which the people of the state, the industrial leaders and others who have spearheaded the drive for higher living standards, are learning well how to better utilize—augurs well for Virginia's future.

Once the leading industrial and commercial mart of the nation, there is no foreseeable reason why the future should not again see this great Commonwealth in the vanguard with respect to national marketing.

Research

RESEARCH has come to the fore in all phases of both industry, education and government throughout the state of Virginia. The educational institutions on their own and in cooperation with industry and state are making great strides in all fields of research. The chemical industries, the textile industries, are spending vast sums of money in the field of research to keep ahead of the market and to develop new products and methods which will enable them to progress.

America's great textile industry has probably taken some of the greatest strides in development and modernization and are now spending large sums on research to find out how to produce better products more efficiently. A concrete example of this is the Institute of Textile Technology in Charlottesville, Va., a cooperative, research and educational center for the textile industry. The institute was organized in 1944 by a small group of far-sighted leaders in the textile industry to solve the need for such a center, and to visualize the benefit the entire industry might derive from it. The Institute is a non-profit organization, wholly owned by

its members, which number over 250 textile manufacturing firms, including some of the largest in the country. The Institute is still young, but already it is justifying the faith of its founder, as concrete results and developments are reported in its laboratories.

The research program involves projects distributed throughout the whole field of textile operations, from raw materials through the processing to the finished products.

Generally speaking, all research carried on at the Institute falls into one of four major categories: (1) Fundamental research which should be of benefit and interest to the industry as a whole; (2) Research of a confidential nature belonging solely to the mill initiating the work; (3) Research of a confidential nature on specific problems presented by an allied industry, and (4) scientific research carried on by the students for their master's thesis or doctor's dissertations as part of requirements for the academic degree.

Research in other fields is carried on by private or commercial firms, designed to supply modern research and development facilities and general technical consulting services to agriculture and industry.

At the University of Virginia research programs are flourishing. There are two parallel agencies—the Bureau of Population and Economic Research—serving business and manufacture, large and small—and the Bureau of Public Administration, serving the commonwealth, the cities and the counties. Though they are separate, these two Bureaus work closely in many of their studies. In Richmond, the Virginia Institute for Scientific Research, a non-profit institution, was founded primarily for the advancement of fundamental research. At present it confines itself exclusively to research, chemicals and physics. The institute relies on three sources for its revenue. One, a biannual appropriation by the Virginia General Assembly, is especially indicative of the state's widespread interest in the technological advancement of the industrial economy. The other two sources are unrestricted gifts from industry and individuals, and sums paid for contract research.

Industrial research must, of course, have its roots firmly established in fundamental scientific investigation, and constituting this base are many of Virginia's more than 30 accredited institutions of higher learning.



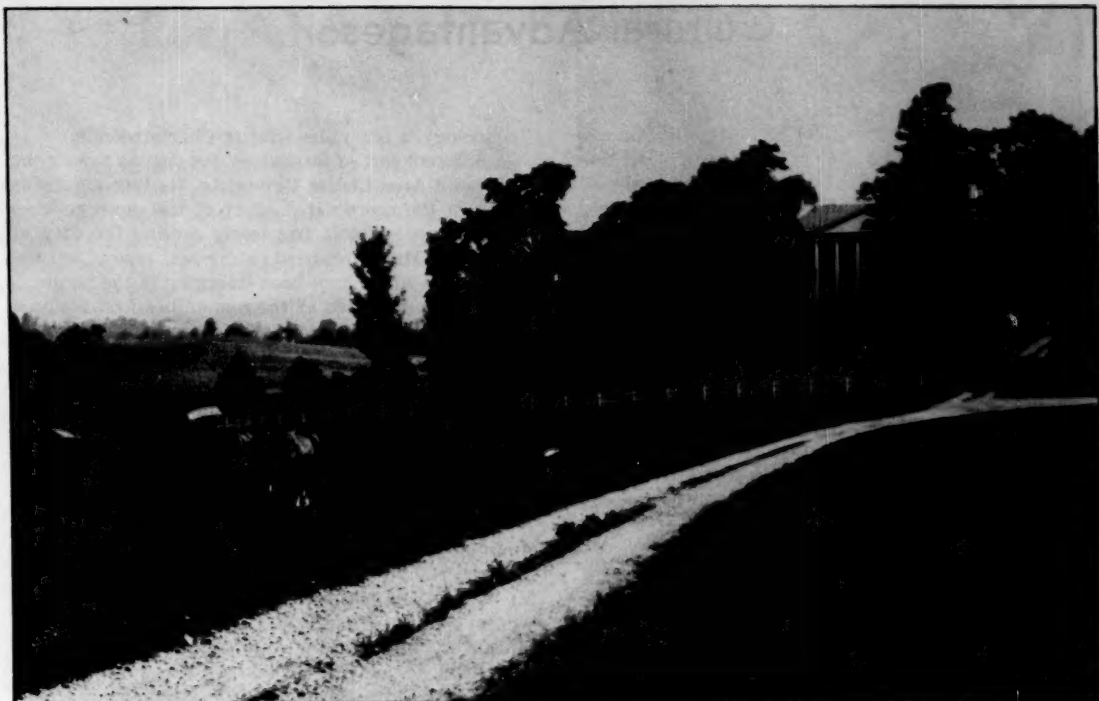
The Wren Building of the College of William and Mary, is the oldest academic building standing in the United States.



Washington and Lee University at Lexington. General Robert E. Lee is entombed here.



Virginia Polytechnic Institute at Blacksburg, is an agricultural and mechanical college.



Health and Climate

VIRGINIA has long been noted and has gained considerable renown for its medical schools, colleges and health facilities. From the point of view of state expenditures for health and hospitals, the U. S. Bureau of Census reports Virginia is spending on the state level approximately 11 cents out of every \$100 of residence income for public health programs, roughly 50 per cent above the rate of spending averaged for the 48 states. This is consistent with the findings of the U. S. Public Health Survey in 1950 of expenditures by State Health Departments. Administration of, and expenditures for, public health programs in Virginia are known to be more concentrated at the state level than is usual in most states, so these figures can't be taken as conclusive evidence that Virginians are spending more of the income for public health than is the case nationally.

Under the Hill-Bourke program an expenditure of \$48,000,000 will have been made from 1948 to 1955, when all Virginia hospitals now approved have been completed. This will amount to a \$13.60 per capital expenditure for Virginia, compared with \$10.30 average for the nation as a whole. The availability of fine facilities and the attitude of the state should be conducive to a higher standard of health for all people.

Industry will find that Virginia has no days too hot or too cold for efficient labor performance, for there are no great extremes of temperature. Nevertheless, there are differences in the three major topographic prov-

inces. In the Coastal Plain temperatures are the most equable and are quite stable from day to day. The Piedmont Plateau sees greater ranges but sudden and decided changes to warmer or colder weather are comparatively rare. The greatest temperature differences occur in the mountains and the Great Valley where elevation and topography produce marked effects.

Annual precipitation in Virginia, averaging about 42 inches, is sufficient to meet almost any reasonable human requirements but not so heavy as to be an obstacle to sound agricultural and industrial development. This rainfall is distributed with reasonable uniformity throughout the year and in the various regions of the state. A few states have greater precipitation, but most have less, and the annual average for the nation is a third less than for Virginia.

	Coastal Plain	Piedmont	Great Valley
Mean temperature:			
Winter	39.8	35.8	33.8
Spring	56.8	55.3	52.7
Summer	77.2	75.0	71.3
Autumn	60.8	57.4	55.1
Average precipitation— inches	43.54	41.62	41.30
Growing season— days	190-240	180-210	160-190

Cultural Advantages

RICH in cultural and historical heritage, Virginia offers opportunities for all in most areas throughout the state. The Commonwealth is one of the great educational centers of the nation, with 30 famed colleges and universities scattered throughout Virginia, offering practically any type of course desired. In addition there are numerous Junior Colleges, Business Colleges, night schools and preparatory schools. Every state in the union and many foreign lands send their young men and women, boys and girls, to study and advance themselves in cultural attainment in the Old Dominion. The strength of Virginia's colleges continues to be in the broad liberal arts training offered in almost all of them. This reaches back more than two centuries and a half to the chartering of the College of William and Mary by the king and queen of England in February 1693, with the Rev. James Blair as president. In all the nation only Harvard University, chartered in 1636, is older. The vigor of this ancient college is shown in the diversity of activities at Williamsburg and at the two branches at Richmond and at Norfolk. This latter, in cooperation with Virginia Polytechnic Institute.

In education, as well as in industry, new demands create new opportunities. Usually adjustments to new curricula are made within the colleges and universities to take advantage of these opportunities. Sometimes a brand new institution is evolved, like the Institute of

Technology, a few miles west of Charlottesville.

A different sort of institution, yet just as new, is the Richmond Area Center University. Its formation was begun in the coordinated effort of the seven colleges and universities most frequently serving the City of Richmond. This is modeled on the new type of university centers which have been emerging in the South.

While the tradition of the humanities first fostered by William and Mary continues to be the strongest in many of the Virginia colleges, most of them are seeking in a variety of ways to meet the demand for new sorts of training without departing from time-tried cultural patterns. Among famed universities are the University of Virginia, the Virginia Polytechnic Institute, located in Blacksburg; The University of Richmond, the Virginia Military Institute, William and Mary, and many others. Famed church colleges throughout the state include Hampton-Sidney College, for the Presbyterians, Randolph-Macon College of the Methodists, and many others. One of the most famed women's colleges in the United States is Sweetbriar College and others in the state include Hollins College near Roanoke, and Mary Baldwin College in Staunton. Noted theological schools in Virginia include the Union Theological Seminary in Richmond for Presbyterians, and the Protestant-Episcopal Theological Seminary near Alexandria.



The Rotunda of the University of Virginia, at Charlottesville, was designed in detail by Thomas Jefferson. The famous Liberty Bell statue of Jefferson is in this building.

Recreation

VIRGINIA communities, both large and small, are well aware of the high importance of recreation in the life of the people. As a result, local parks and playgrounds are established where the whole family may find rest and relaxation and opportunities for participation in active play.

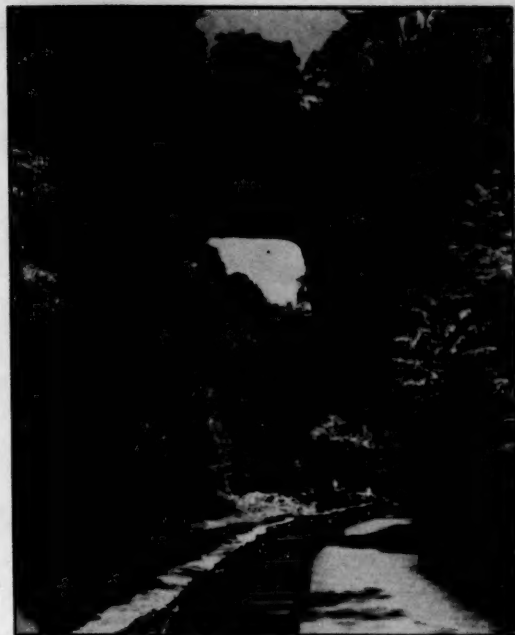
These community parks and playgrounds, maintained in most instances by local governments, are supplemented by a series of larger national and state parks, forests and recreational areas which combine to provide the family with wonderful opportunities for life in the great outdoors. Indeed, with few exceptions, every Virginia community is within a 50-mile radius of a national or state park, forest or recreational area and some have more than one within close touring range. These, together with mountain and seashore resorts and Wayside Parks, provide a wide diversification of recreational opportunities in Virginia.

Outstanding among the recreational developments is the Shenandoah National Park, high in the Blue Ridge Mountains. This 180,000-acre mountain playground supports a forest cover which is predominantly oak, with most of the remaining area meadowland. Miles of well-developed trails lead the hiker or horseback rider into the heart of the park where he may enjoy unusual flora and fauna and see beautiful waterfalls, hills, hollows, mountains and valleys. The feature of the park is the Skyline Drive of 107 miles, which runs along the crest of the mountains and through the park. At its southern terminus near Waynesboro, the Skyline Drive connects with the Blue Ridge Parkway, another mountaintop highway over the Blue Ridge Mountains which, when completed, will connect the Shenandoah and Great Smoky Mountains National Parks.

Virginia has a well developed system of nine state parks and three state recreational areas. They are well scattered throughout the state—in the mountains, in the rolling Piedmont section and beside lakes, bay and rivers. All provide opportunities for such recreation as swimming, boating, fishing, picnicking, hiking and other sports. Many have housekeeping cabins for a week's vacation and nearly all have camping areas.

By far the largest recreational areas are the George Washington and Thomas Jefferson National Forests, which extend for nearly 300 miles along the forested slopes and crests of the western upland borders. In these are a million and a half acres embracing highly historic and scenic sections of the Blue Ridge, Massanutten, Shenandoah and Allegheny Mountains. They have recreational areas ranging from picnic spots to mountain lakes for swimming, fishing and camping. The national forests have some of the best hunting areas in the state.

A new recreational development in Virginia is the John Kerr Dam (Buggs Island Reservoir), near Clarksville. Here the waters of the Roanoke River have been impounded to make a lake with an 800-mile short line.



Natural Bridge, one of the seven natural wonders of the world, is near Lexington.

While the recreational facilities planned for this development have not yet been completed, there are opportunities for boating, fishing and picnicking.

Besides attractive mountain parks, forests and resorts, Virginia provides fine recreational opportunities at its ocean, bay and river resorts. Outstanding is Virginia Beach, fronting on the Atlantic Ocean, near Norfolk—ideal for bathing, swimming, fishing, horseback riding, tennis, golf, bicycling, with dancing afternoons and evenings to music by name bands. Ocean View and Buckroe Beach, both on the Chesapeake Bay, and Colonial Beach, on the Potomac River, offer bathing, swimming, boating, fishing, bicycling, dancing and other sports.



The Governor's Palace, at Colonial Williamsburg, was the home of seven royal Governors. It was built about 1720.



St. John's church at Richmond, where Patrick Henry spoke the immortal words, "Give me liberty or give me death!"

The Virginia Heritage

It is not unusual that the sons and daughters of Virginia think, and sometimes speak, of "The Virginia Heritage." To those who have not lived with it, the "Virginia Heritage" could well be thought of as intangible or even imaginary. To those who have lived with it, it is as real as today. From Thomas Jefferson to Harry Flood Byrd, the usage "Virginia Heritage" has a positive meaning which is alive, virile. It means, among other things; a sincere respect for the rights of the individual citizen. With this is coupled an inherent regard for law and order. Personal integrity is taken for granted. Dedication to public service, whether at the local, State or National level is expected of all those who have the capability to perform this service. The right to live and make a living in accord with the dictates of one's own conscience is jealously defended. It is not unnatural that this concept should be real in a state which stemmed from Jamestown and which gave birth to and nurtured the philosophies of Thomas Jefferson, George Mason, James Madison, Robert E. Lee and Woodrow Wilson.

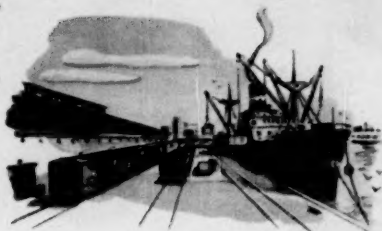
The homes of these and other Virginia patriots are preserved as revered shrines. Their history-making comings and goings are recorded, that all might see and be inspired thereby, on a statewide series of historical highway markers.

Despite its age and its scope, the "Virginia Heritage" is neither smug nor provincial. It is so real a part of the everyday pattern of Virginia life that it is never the occasion for boastfulness. It is, rather, accepted gratefully as is the mild climate with which the State is blessed. It is a part of the matchless spirit of Virginia, one of the many reasons which makes Virginia an ideal place in which to live and make a living, graciously and effectively.



Monticello, famed home of Thomas Jefferson, at Charlottesville.

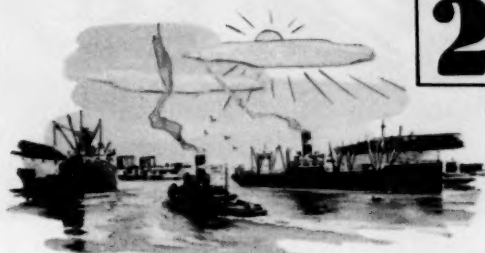
Things You Should Know About **THE PORTS of VIRGINIA**



1

Virginia Ports Can Save You Money

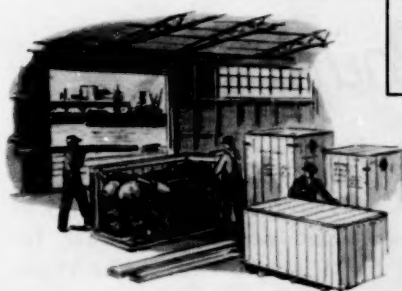
Rails to shipside provide direct cargo interchange. Sprinkler protected warehousing keeps insurance rates low. Favorable overland rate differentials offer substantial savings from many points as far west as Wyoming, north to Canada.



2

Virginia Ports Are Dependable

Service by 9 trunk-line railroads. Belt line connections. Ample crews of loyal port workers. Hundreds of piers bristling with modern, mechanized equipment—many with transit sheds. Plenty of open and bonded warehouses—more than 9,200,000 sq. ft. of dry storage space. 124 steamship lines with *regular* sailings to 226 world ports. 18 permanently located foreign consulates.



3

Virginia Ports Offer Specialized Services

Shipside packaging service—crating items from ball bearings to complete hospitals. Modern fumigation facilities. Cranes with capacity up to 90 net tons. Shipside grain facilities. Terminals especially equipped for handling fertilizers and fertilizer materials in bulk. Oil handling facilities for both export and import. Ample foreign banking service.

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New York 4, N. Y.
Phone: Digby 4-5650

MID-WEST
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Chicago 4, Illinois
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WASHINGTON
1616 "K" Street, N. W.
Washington 6, D. C.
Phone: Sterling 3-2290

. . . OR



DIRECTOR, BUREAU OF COMMERCE
Virginia State

Ports Authority

254 GRANBY ST., NORFOLK 10, VA.

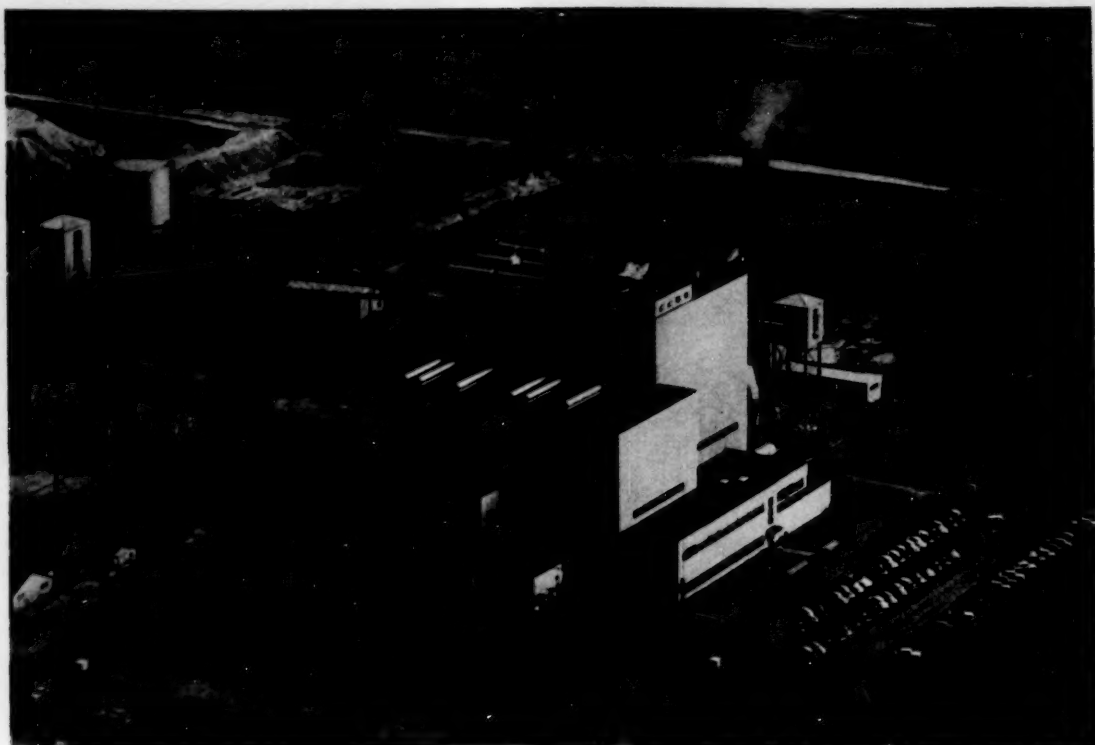
Phone MADison 2-1671

HAMPTON ROADS PORTS: Newport News, Norfolk, Portsmouth and South Norfolk.

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Cargo Sam Says:
Remember—you can
save time, money and
headaches when you
ship through the
Ports of Virginia.





PORTSMOUTH STATION
at Portsmouth, Virginia

more power *at the "Top of the South"*

Another 100,000 kilowatts of electric power were added to the Vepco power system with the recent completion of the new addition to the PORTSMOUTH STATION at Portsmouth, Va.

Another 100,000 Kw. unit, now about completed, is being added to the POSSUM POINT STATION near Quantico, Va.

And a third project—the ROANOKE RIVER HYDRO DEVELOPMENT, near Roanoke Rapids, N. C., now under construction—is expected to add still another 100,000 Kw. to the system before the end of 1955.

POWERED FOR THE FUTURE, TOO!

All this adds up to a plentiful supply of economical and dependable power for present and new industries in the Vepco service area at "THE TOP OF THE SOUTH" where the present-day capacity already is two and one-half times what it was only a few years ago.

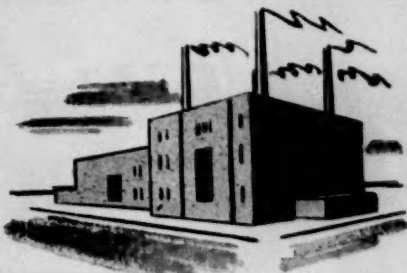
Inquiries addressed to our Area Development Department for plant site and other information will have prompt attention and, of course, will be held in strictest confidence.

VIRGINIA ELECTRIC AND POWER COMPANY

Richmond 9, Virginia

For Your New Plant—

**No Other Community in the
Virginia-West Virginia area
Has More to Offer You than**



BLUEFIELD

"The Air-Conditioned City"

- High in the Appalachian Chain, at the foot of the East River Mountain
- In close Proximity to the tremendous markets of the East as well as the Middle-West—on main line of Norfolk-Western Railroad.
- Airline service to all sections of the country from modern airport.
- Intersection of a network of highways, including the world-famous West Virginia Turnpike, soon to be extended North and South.
- Unlimited Water Supply, with East River flowing east and Bluestone River flowing north.
- In the center of the great Pocahontas Coal Fields, with unlimited coal supply at your factory doorstep.
- Ample power from Appalachian Power Company for all need, as well as natural gas.
- Abundance of minerals, timber and farm products readily accessible
- Population of Bluefield, Virginia, and Bluefield, West Virginia, combined is over 27,000, according to 1950 U.S. census.
- Large reservoir of unspoiled labor—skilled, semi-skilled and unskilled, augmented by population of 450,000 in fifty-mile radius.
- Clean, progressive city—three times named the "cleanest city in America" in the 15,000 to 30,000 population class.
- Excellent shopping facilities, strong banks, progressive newspapers and radio stations, a new television station, large public-operated parking building accommodating 800 cars, progressive government with reasonable tax rate, fine schools, churches, recreational facilities and cultural advantages.

And more important than all else, a fine spirit of co-operation among the entire population, with a friendly attitude toward newcomers.

Come for a Day and You're Sure to Stay!

Write, telephone or Call in Person—

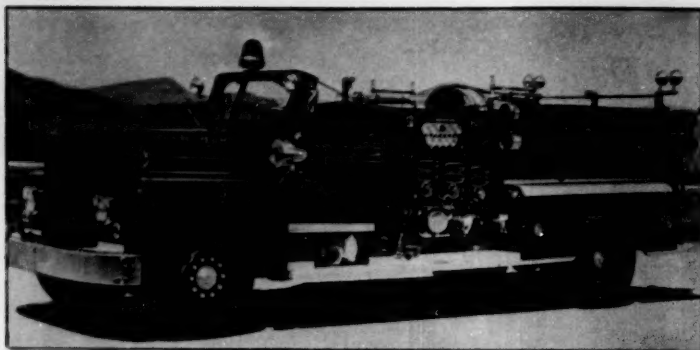
THE BLUEFIELD AREA DEVELOPMENT CORPORATION

— or —

THE BLUEFIELD CHAMBER OF COMMERCE

Post Office Box 218

Bluefield, West Virginia



Raring to go is this new fire truck, a product of the South's only fire truck manufacturer, the Oren Roanoke Corp., located in Roanoke.

\$3-million Aluminum Plant To Be Built Near Richmond

Reynolds Metals Company will construct a \$3,000,000 aluminum extrusion plant on its Bellwood property in Chesterfield County, 14 miles from downtown Richmond. The announcement was made by J. Louis Reynolds, vice-president in charge of operations.

Mr. Reynolds said that construction will begin in the early summer and the plant is expected to be in operation by the first of next year. Approximately 200 persons will be employed at the plant.

Aluminum extruded shapes will be produced from two presses to be installed

in the plant, for the architectural, construction and transportation industries. Aluminum billets for use by the plant will be shipped from the company's new Robert P. Patterson reduction plant in Arkansas.

The vice president said that the plant is the first one of its kind to be built in Virginia and will supply the eastern market. He said the extrusion market had tripled in the past five years. The company has extrusion plants in Phoenix, Arizona, Grand Rapids, Michigan, and Louisville, Kentucky.

Mr. Reynolds said that the company's extrusion division is headed up by three men who have a total of 75 years in the business: C. J. Beneke, manager; Russell

V. Bobb, assistant manager, and H. D. Bitner, staff assistant.

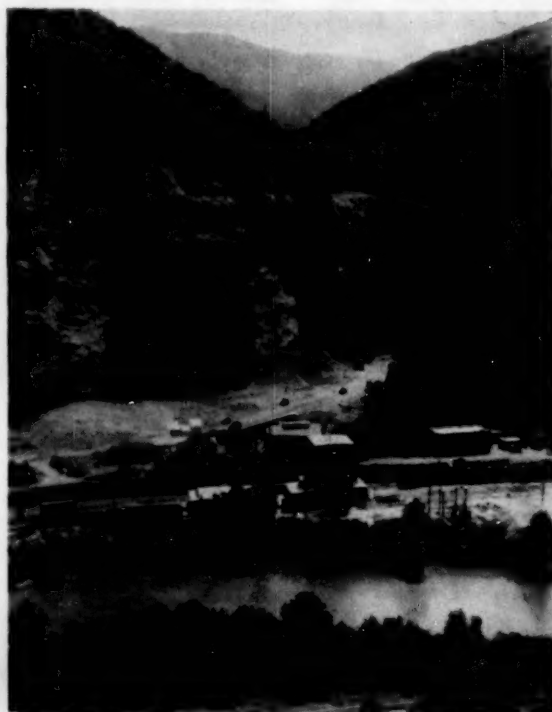
Multi-million Dollar Plant To Produce Chemicals in W. Va.

Columbia-Southern Chemical Corporation has announced plans for the construction of a multi-million dollar titanium tetrachloride producing plant at Natrium, W. Va.

According to E. T. Asplundh, president of Columbia-Southern, the contract for design and construction of the Natrium facility has been awarded to Catalytic Construction Company of Philadelphia.

Preliminary grading of the site for the new plant is under way. Located on the Ohio River on a site near the firm's large chlorine, caustic soda producing plant, construction of the new chemical producing unit will commence within a month. Mr. Asplundh stated that the plant is scheduled for partial production by April, 1956, and current plans call for capacity production three months later.

Mr. Asplundh stated that, during the late 1930's, Columbia-Southern initiated research work on the chlorination of various titanium-bearing ores in order to provide a more economical and practical means of titanium tetrachloride production than was then available. This research work, which resulted in the development of a basic patent position in this field, has contributed significantly to the commercialization of titanium.



"Aerial View of Dolomite Plant at Buchanan, Va., showing the James River in the foreground."

HIGH GRADE MAGNESIUM CALCIUM LIMESTONE

CHEMICAL ANALYSIS-MAGNESIUM LIMESTONE

Recent Sample

Calcium Carbonate	55.44%
Magnesium Carbonate	43.48%
Silica	0.20%
Iron Oxide	0.68%
Aluminum Oxide	0.62%
Phosphorus Pentoxide	0.04%
Manganese	0.0337%
Zinc	0.0025%
Calcium Carbonate Equivalence	107%

CHEMICAL ANALYSIS-HIGH CALCIUM LIMESTONE

Recent Sample

Calcium Carbonate	97.64%
Magnesium Carbonate	1.10%
Silica	.42%
Iron Oxide	.136%
Aluminum Oxide	.60%
Magnesium Oxide	.53%
Phosphorus Pentoxide	.015%
Sulphur Trioxide	.005%
Manganese	.007%
Zinc	Trace
Calcium Carbonate Equivalence	99%

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ROANOKE, VIRGINIA



Location!

Charlottesville is in the heart of the most beautiful area in America. It is on the main lines of both the C & O and Southern Railways and a network of highways. A new airport will be opened in July.

Ideal living conditions, ample labor, sufficient power, fuel, water and raw materials to meet almost every requirement of industry can be found in the city and the County of Albemarle. Write for survey and descriptive matter.

CHAMBER OF COMMERCE
CHARLOTTESVILLE, VIRGINIA

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Within Easy Reach Of The World
That's

CLIFTON FORGE, VA.

The ideal place to put a Plant!

On Main Line Of C&O Railway, and at the Cross-roads of U. S. 60, east and west; U. S. 220 north and South.

Half-Hour's drive from The Homestead Hotel, at Hot Springs; 40 minutes from The Greenbrier at White Sulphur Springs. For Choice Industrial Sites — Write

CLIFTON FORGE CHAMBER OF COMMERCE
Clifton Forge, Va.

Looking For a Plant Site?

CULPEPER, VIRGINIA

Only 68 Miles South of Washington, D. C.

OFFERS

- Excellent Native-born Labor Supply
- Nearness to Big Market Centers
- Top Rail and Truck Facilities
- Recreation—Ideal Living Conditions
- Natural Gas—All Utilities
- Healthful Mild Climate All Year



ATLANTIC STEEL COMPANY'S WAREHOUSE DIVISION HAS EXPANDED

To provide more room for additional steel products—particularly heavy structurals up to 65 feet long—our warehouse space has been increased by 50%. Now more than 100,000 square feet are used to stock warehouse items for immediate delivery to our customers.

In addition to more space, new equipment has been installed, including a new friction saw, a power hack saw, and an additional plate shear.

These new improvements make Atlantic Steel's Warehouse Division not only one of the largest, but also one of the most complete steel warehouses in the South.

For steel in a hurry—one piece or a carload—call, write or wire.



"Service In Step With Southern Progress"

WAREHOUSE DIVISION

Atlantic Steel Company

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\$1½-million Electronic Plant Nearing Completion in Georgia

A new \$1,500,000 radio-TV-electronic components plant—the industry's first major Southern facility—is being added by General Instrument Corporation to its five factories in the U. S. and Canada as part of a Company program of "expansion and dispersion for the future," Board Chairman Abraham Blumenkrantz has announced. The new plant, adaptable to either civilian or military production, is now being completed at Statesboro, Ga., and represents the 6,400-population farming center's first industry.

Behind the move, Mr. Blumenkrantz stated, is Company planning "not just for the immediate future but as much as ten years ahead," which takes into account both "the danger that the cold war might become 'hot' and the limitless peacetime horizons of TV and electronics."

"If the cold war were to ignite tomorrow," he declared, "a few well-placed atomic bombs might wipe out, or seriously cripple, virtually the whole defense communications industry, now concentrated in prime industrial 'target areas.' We believe dispersion of manufacturing facilities is a partial answer and the new Statesboro plant is our 'war insurance policy' for the industry."

"But it is also 'prosperity insurance.' Given peace, we look to 55,000,000 television sets in American homes within five years, to mass production of color TV, to three-dimensional television and to other electronic advances which are still just 'inventors' dreams. And our new plant will enable us to produce the components necessary to the industry's expansion."

General Instrument, which makes components for almost every major radio and TV set manufacturer, as well as for the military, plans to start production at Statesboro around June 1. Mr. Blumenkrantz said. Employees will be trained in the specialized processes under a State-sponsored program and, as training facilities permit, both production and employment will be expanded, with 400 to 500 employees the goal within a year and possible eventual employment of 1,000.

A \$1,000,000 one-story, aluminum and brick 106,000 square foot structure, which will house some \$500,000 worth of equipment, the plant is air-conditioned throughout and designed for complete flexibility of production, with a wide open manufacturing area and a power distribution system which permits changing of machine layout at any time for addition or diversification of products. In line with Company expectations for continuous growth, the plant's design and 33 acres of ground allow for its expansion, when required, without a day's loss of production.

Today, 50 per cent of all power generated by electric utilities is generated by coal.

an industrial opportunity in a plant site

with coal, gas, limestone, water sources "on the scene"

Situated at the gateway to the South in the southwestern part of Virginia, an industrial site of 2,100 acres with the basic raw materials of the chemical industry at hand.

coal

There are coal reserves in excess of 100,000,000 tons immediately adjacent to this site. This coal is of high volatile rank, low in sulphur and ash—an excellent steam and coking coal, which can be mined at an exceptionally low cost.

gas

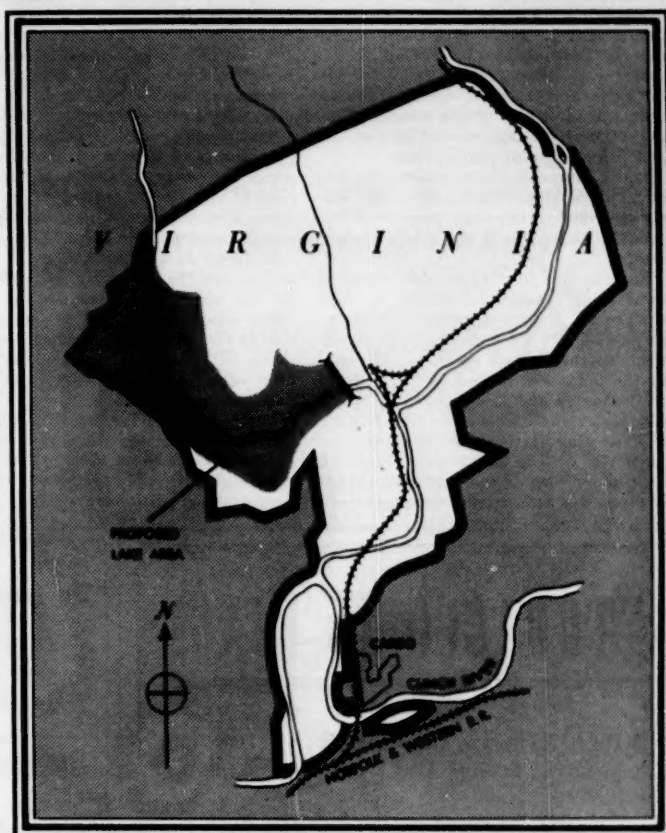
Natural gas reserves of over 35,000,000,000 cubic feet have been proven to date on Clinchfield's 400,000 acres of gas properties. Through its continuous drilling program these reserves are increasing yearly.

limestone

Ample supplies of limestone are locally available from sources controlled by Clinchfield.

water

Included on the site is a projected reservoir with a water storage capacity of 11,875 acre feet. In addition the Clinch River parallels the southern boundary of the site.



labor

Within a 10 mile radius there are seven towns with ample supply of native labor. Our own application files carry over 10,000 names.

transportation

This site is served by the Clinchfield Railroad and the Norfolk & Western Railway giving access to all markets, north, east, south and west.

For further information, write to H. W. Livingston, Vice President
CLINCHFIELD COAL CORPORATION
A Subsidiary of The Pittston Company
DANTE, VIRGINIA

Ten Million Dollar Plant To Locate in Missouri

It has been announced that Missouri had been successful in obtaining a \$10,000,000 industry.

Several states were competing for an Air Force rocket engine manufacturing and testing plant which will be located at Fort Crowder.

An announcement by Roger Lewis, assistant secretary for the Air Force, said preliminary survey and site preparations will start immediately. The initial manufacturing plant of 200,000 square feet of floor space is expected to get under way later this year. The plant will be built and operated under contract with the Air Force by the Aero-Jet-General Corp., a division of the General Tire and Rubber Co. of Akron, Ohio.

Lewis indicated initial production will employ 500-1,000 civilians, including technicians. The long-range plans call for eventual expansion if the project is successful.

Securing of the plant for Missouri came after coordinated efforts by various groups. A representative of the company was shown different sites in southwest, northwest and northeast Missouri by the industrial section of the Division of Resources and Development. The division airplane was used to expedite the trip. In each section the representative conferred with local interests regarding sites under consideration, as well as other factors of industrial development.

Rocket engines are to be both produced and tested at Crowder with a testing area set aside on the present 9,000-acre military reservation. Initial plant production should begin in mid-1956, according to Lewis.

Republic Plans Major Expansion At Gadsden Steel Plant

Directors of Republic Steel Corporation have approved a major expansion program at the company's Gadsden, Alabama plant for the production of hot and cold rolled sheets in coils or cut lengths and continuous galvanized sheets. The investment will establish Republic as an important source of supply of these products in the southeastern states.

The new facilities also will stabilize operations at Republic's Gadsden mill which have been sporadic in recent months due to fluctuating demand for large diameter gas transmission pipe, a major product of the plant.

Included in the equipment to be installed are the following: A continuous 54" hot strip mill; a continuous 54" 3-stand tandem cold mill; a 54" temper mill; a continuous pickle line; annealing furnaces, finishing, shearing and shipping equipment; and a 48" continuous galvanizing line.

This equipment will permit the production of hot and cold rolled sheets and galvanized sheets up to 48" in width.

C. M. White, president, said that the expansion will provide rolling capacity

greatly in excess of that which will be used immediately.

"We have conducted extensive market surveys," he said, "which convince us that Republic's entry as a major supplier of cold rolled sheets in the Southeast will not only greatly expand the use of these materials by present manufacturers but will encourage more fabricating companies utilizing sheet steel to go into business in the Southwest. . . ."

Business Wary of Taxes

(Continued from page 57)

number of sales or excise taxes are levied at the point of production.

On the other hand, Dealers and Distributors of Commodities and Services are apt to take Sales taxes as seriously as any other type since it is felt that they have the effect of cutting volumes of business and are therefore indirectly reducers of Income.

Viewed as a whole, the 16 Blue Book states of the South would generally be considered by Business to enjoy relatively good rating.

Taxes on Income account for 7% of the Region's collected revenue against 8% for the United States as a whole.

Consumer taxes of all types including general sales taxes, selected sales taxes and excise taxes account for 42% of collected revenue against 34% for the Nation.

And lastly, Miscellaneous charges and collections make up 51% of the total, against 58% for the U. S. at large.

"TOBACCO IS KING"

MILLIONS paid to Tobacco Farmers in Danville's Trading Area every year.

14,000 Employed in One Industry Alone

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Year Round Recreational Facilities and Sports
Vacation Spots—Many Fine Beaches and Mountain Resorts
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DANVILLE FIGURES

Population: City—45,000; 10 Mile Radius—70,000; 30 Mile
Trade Radius Over 250,000.
Bank Clearings, 1954—Over \$518,000,000.
Trade—Virginia's 4th Largest Combined Wholesale and
Retail Trade and Marketing Center—Over \$250,000,000.
(1954)

TRANSPORTATION FACILITIES

Danville, Virginia is located at the southern border of Virginia, in Pittsylvania County, at the intersection of U.S. Highways 29, 58 and 360. It is served by the double tracked main line of Southern Railway, the Atlantic and Danville Railway, the Carolina and Northwestern Railway, Eastern Airlines and Piedmont Airlines, Eleven Motor Freight Carriers and Bus Service.

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Single-Unit Textile Mill"

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GALAX FURNITURE CO.

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Keys to Richer Life Listed At West Virginia Conference

"Expanding industry and ever increasing industrial progress is the key to a richer life for the people of the United States," Harold Brayman, director of the Public Relations Department of the Du Pont Company, stated at Morgantown. His talk, "Industrial Development and Human Progress Go Together," was a feature of the annual West Virginia Industrial Development Conference at West Virginia University.

"If the people of the United States want to continue to increase their standard of living and continue to develop cultural and social opportunities, the basic program is to produce more," Mr. Brayman declared. "Only when we produce more can we have more, and the primary way to produce more is to expand and improve the facilities for production . . .

"This can be accomplished only through the application of our national resourcefulness, through bringing our technical capacities to more of our people, through lowering our costs and improving the performance of our industry.

"Two thousand men in the modern Du Pont neoprene plant at Louisville, Ky., can produce as much rubber annually as 80,000 Malaysians laboring all year from dawn to dusk on the plantation in the steaming jungles of Indonesia. The difference is that the Americans have in the neoprene plant a multi-million dollar tool not available to their Asiatic counterparts."

One of the vital problems facing the United States today, Mr. Brayman said, is to make clear to everyone "the relationship between business progress and human progress and how they necessarily go together."

Norco, Louisiana, to be Site For Synthetic Glycerine Plant

The first step in a three phase program for making synthetic glycerine by an entirely new method was announced by Shell Chemical Corporation.

According to R. C. McCurdy, president, the firm will begin work immediately at Norco, La., near New Orleans, on a new hydrogen peroxide plant with a design capacity of more than 30,000,000 pounds a year. The second plant, to be built later, will make acrolein. The third plant will produce the glycerine, using acrolein and hydrogen peroxide as intermediates.

The hydrogen peroxide production figure is on a 100 per cent basis. Actually, the chemical is manufactured in solutions of various concentrations.

All these facilities will employ new processes invented and developed by Shell Development Company, where improved and more efficient routes to glycerine have been under investigation for a number of years. They also originated the earlier process for making glycerine from petroleum, as currently used in Shell Chemicals Houston, Texas, plant which now supplies more than one-

quarter of all the glycerine used in the United States.

Lynchburg, Va., To Be Site Of Atomic Reactor Parts Plant

Plans for the construction of what is believed to be the first privately financed major plant for the manufacture of fuel elements and other reactor core components for the nuclear power industry, were announced by the Atomic Energy Division of The Babcock & Wilcox Company. The plant, to be located about 5 miles east of Lynchburg, is expected to be completed by the end of the year, the announcement said.

The proposed site of approximately 500 acres bordering the James River has been

selected in accordance with regulations used by the Atomic Energy Commission in selection of government sites. Actual construction on the main building is expected to start in a few weeks. It will be a one-story structure of approximately 100,000 square feet, and will house various laboratories and offices as well as the complex manufacturing equipment.

B&W announced last year that it anticipates making complete nuclear steam generators for the production of electric power. The company has already developed and fabricated special equipment for many of the major atomic energy installations. The new plant will provide properly designed facilities for the manufacture of many types of special equipment for this rapidly growing industry.

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CAPITAL, IS WITHIN EASY DAY'S DRIVING OF
HALF THE POPULATION OF THE UNITED STATES

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CHAMBER OF COMMERCE
FRONT ROYAL, VIRGINIA

Republic Steel Allots \$35-million For New Equipment and Facilities

Appropriations totaling \$35,000,000 for new equipment and facilities have been approved by directors of Republic Steel Corporation, it was announced by C. M. White, President.

Included is equipment for Republic's recently announced program for the production of hot and cold rolled steel sheets at the Gadsden, Alabama plant. Republic's entry into the flat-rolled business in the South is geared to meet the growing demands of the steel fabricators in this booming industrial section. Also included is the previously announced by-product coke oven battery at the Massillon, Ohio steel plant.

Other major projects to be undertaken as a result of the directors' action include:

Installation of equipment at Republic's Pressed Steel Division, Cleveland, to produce over 650,000 feet per month of plastic pipe in a variety of sizes. Republic presently produces plastic pipe at Magnolia, Arkansas.

Completion of a program started in 1950 to rehabilitate the by-products and Benzol plant is authorized.

Equipment to permit steel pipe from $\frac{3}{4}$ " to 4" diameter to be coated with plastics for special uses where unusual corrosion resistance and high strength is desired. This equipment will be installed at Republic's Youngstown plant. The plastic coated steel pipe will be an

entirely new product of the company.

Facilities will be installed at Republic's Warren, Ohio plant to permit 1,500 tons per month increased production of silicon strip, widely used in electric motors and other electric products.

The Genesee ore body adjacent to Republic's Tobin Mine, Crystal Falls, Michigan will be opened up making available at least 1,500,000 tons of underground ore.

Several dozen other projects will be undertaken at various Republic plants with the funds appropriated by the directors.

Twin-Engine Executive Aircraft Licensed for Temco Production

Temco Aircraft Corporation's new twin-engine executive aircraft—the Riley '55—has been issued an aircraft type certificate by the Civil Aeronautics Administration.

CAA officials said the Riley '55, an extensive conversion of the single-engine Navion, is the first light twin conversion ever licensed as a new aircraft type.

It is an improved version of the Riley Twin, a twin-engine Navion conversion which Temco turned out in quantity during 1953-54.

The new twin is equipped with two 170-horsepower engines, an airline-type control quadrant, a 106-gallon fuel system with optional wing tip tanks of 20-gallon capacity each, and other advanced features.

With tip tanks, the Riley '55 has a maximum range of 1200 miles. It cruises at 170-miles-an-hour, and its maximum gross weight is 3600 pounds.

Temco's Greenville, Tex., plant now is turning out first production versions of the executive craft.

Savannah District Authority Announces Development Group

Announcement of a new development corporation was made by the Savannah District Authority. The new company will be known as the Central Warehouse & Development Corporation. Mr. Richard Heard is the President of the new concern and the other incorporators are Roy I. Hussey, Wm. Hugh Stephens and Donald F. Stewart.

The corporation has acquired land on Lathrop Avenue which is bounded on the north by "Industry Drive" and on the south by the main tracks of the Central of Georgia Railway Company. The company is prepared to construct immediately, 125,000 square feet of warehouse space in units of from 4,000 to 50,000 square feet to meet specific requirements of tenants. Buildings will be of modern, fireproof construction which will allow minimum insurance rates. The company will enter into long term lease agreements and will build to meet the requirements of the tenants, including office space. The program is not confined to warehousing alone and light manufacturing concerns would also find the area desirable.



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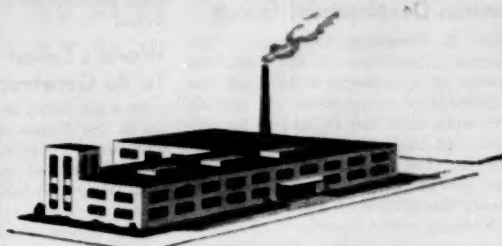
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GALAX CHAMBER OF COMMERCE
GALAX, VIRGINIA

Columbia, S. C., Chamber Names Industrial Development Group

Frank D. Needham, Chairman of the Industrial Committee of the Columbia Chamber of Commerce announced the appointment of a committee of specialists to work with the Industrial Service Bureau and to serve in an advisory capacity to the Industrial Committee. Those accepting appointments to the Advisory Committee on Industrial Location Factors, were: Senator A. Fletcher Spigner, Jr., — County Government; Thomas F. Maxwell, City Manager—City Government; S. W. Gable, Acting Director of State Development Board—State Government; Allan C. Mustard, Commercial Manager of the South Carolina Electric & Gas Company—Power and Industrial Fuels; Guy L. Varn, Superintendent of City Schools—Education; Robert W. Bailey, Richland County Farm Agent—Agriculture and Natural Resources; Carlisle Reed, State Employment Security Commission—Labor; and George E. Billings, Director of Industrial Service Bureau—Transportation, Sites and other factors.

In making this announcement Mr. Needham said: "We have noted that many companies have plant location teams, with each member of the team assigned one or more factors to investigate. It seemed to us that a logical counterpart to those teams would be a group of local specialists available to sit down—individually or collectively—with

the representatives of companies seeking a location for a plant, office, or warehouse."

World's Tallest TV Tower To Be Constructed in Dallas

On a platform, over a quarter of a mile up in the Texas sky a triple telecaster will beam TV shows to the Dallas area. With the help of American Steel & Wire, this Texas tall tale will soon become a reality.

In a recent week guy strand — over seven miles of it—found its way to Dallas, Texas, to be used in anchoring a new and unique TV tower. The tower will be the tallest man-made structure of its kind in the world.

Featuring a unique two phase design, the Texas tower eventually may handle three stations at one time. Designed by Dresser-Ideco, a division of Dresser-Industries, Inc., of Columbus, Ohio, the main tower will be 1,438 feet high, topped by a triangular platform, each face of which is 75 feet.

Rising from each corner of this platform will be an 83 foot 6 inch antenna with beacon lights making the total height 1,521 feet 6 inches. Present plans calls for Dallas stations KRLD-TV and WFAA-TV to use two of the available sending antennae.

Five levels of guys with six guys to each level will anchor the tower firmly in place even in tornadoes and wind storms in excess of 120 miles per hour. Furnishing approximately 310,000 pounds

of galvanized bridge strand 1 3/8" to 2" in diameter for the guys, U. S. Steel's Wire Division will do its part toward the Texas tall story.

Using a total of 866 tons of steel, the entire facility will rest on solid round leg members which make up 407 tons of the over-all weight.

Servicing the platform in the sky will be a two man elevator operating from the ground up to a 1,420 foot level.

To date, there are only 27 TV towers with a height of 1,000 feet or more. No other existing tower features the two phase triangular platform design.

Southern Firm Buys Northern Power Tool Co.

To further the diversification of products and the expansion of Thomas Industries, Inc., Louisville, Kentucky, Lee B. Thomas, president, announced that the company had purchased the Wright Power Saw and Tool Corp., Stratford, Conn. Purchase price was not disclosed.

Hereafter, he added, the Wright Company will operate as a subsidiary of Thomas Industries with all manufacturing facilities transferred from Stratford to Sheboygan, Wisc., where one of Thomas' five factory sites is located.

Thomas Industries, well entrenched in the home lighting field and in the manufacture of spray equipment, expects to maintain the rising sales figures of the Wright Company. Latest estimates of the potential of the power saw industry are said to be more than \$50,000,000.



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One of the World's

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TODAY ten nationally famous brands of footwear are manufactured and distributed by Craddock-Terry Shoe Corporation, one of the country's foremost shoe manufacturers. Each of these brands reflects the styling astuteness, quality of shoemaking and service which have made Virginia one of the world's important shoe centers. The company operates eight factories within the state.

Natural Bridge

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Lynchburg, Virginia

Orlando Selected as Site For Bedspring Manufacturer

A new industry was announced by Milton D. Blanck, manager of the Orlando Industrial Board, Orlando, Florida. This new company will operate under the name of Florida-Flex Spring Co.

The firm will engage in the manufacture of Bonnel type spring units, generally used in the manufacture of mattresses, sofa beds, furniture cushions, etc.

J. L. Barton, owner and manager of the company, was sold on the idea of operating his business in Orlando through negotiation by the Orlando Industrial Board. Principal reason for selecting the Orlando area as a base of operations was because of the central location as a shipping point to bedding and furniture manufacturers throughout the state of Florida, and, also, the very excellent pool of labor from which can be drawn the kind of mechanics necessary for the operation of the company's equipment.

Million Dollar Steel Mill To Build in Birmingham

The newly organized Southern Electric Steel Co., headed by Hugh Bigler as president and treasurer, will begin immediate construction of a steel mill at 2301 Huntsville road. It will cost approximately \$1,000,000.

Bigler said the mill will be built on a 25-acre plot on the old Huntsville road

and 23rd avenue, N. "We hope we can begin production by the end of the year," he added.

"Initially, the firm will employ about 100 persons, working one eight-hour shift. Capacity at the beginning is expected to be about 25,000 tons per year.

"A second eight-hour shift is planned as soon as production needs require. The firm will be a large consumer of electric power and natural gas.

"Present plans call for erection of a rolling mill, finishing department, melt shop and small office building," Mr. Bigler stated.

Freeport Sulphur Producing At New Louisiana Swamp Mine

Freeport Sulphur Company has begun production of sulphur at a new mine in the swamplands of Louisiana, the company has announced.

The mine, known as Chacahoula, is located near the town of Thibodaux, 50 miles west of New Orleans. Its development is part of a \$25,000,000 expansion program involving four new mines with a combined productive capacity of more than three quarters of a million long tons per year.

Chacahoula is set in the midst of a dense 100,000-acre cypress swamp. The site had to be cleared and drained before construction of facilities and drilling of wells could begin.

The facilities include a power plant to supply superheated water, compressed air and electric power for the Frasch mining

process, an office, machine shop, warehouse, relay station, cooling plant, and storage and loading facilities. The plant has a normal capacity of 3,000,000 gallons of superheated water a day for injection into the deposit to melt the sulphur in place.

Mobile Selected Location For Fishstick Manufacturer

A new industry, geared to manufacture and sell \$1,500,000 of fish sticks in the first year of operation, has located in Mobile.

In announcing in March the activation of Frionor Kitchens, Inc., an Alabama corporation owned by Norwegian Frozen Fish Ltd., Harold S. Luther, sales manager of the present concern and a director of Frionor, said operations had already begun and some 40 Mobilars, drawing a weekly payroll of \$1,800, were employed.

Luther added that he expects annual sales on the nationally distributed product to reach the four-million-dollar mark in the near future. This would mean running three shifts at the local plant instead of one, he pointed out, with a weekly payroll of \$5,000.

The plant, located at Alabama State Docks, represents an investment of approximately \$100,000.

Some 16,000 fish sticks, prepared on an assembly line basis, are turned out each hour, William H. Collier, plant manager, said.

Engineering that aids Virginia's Progress

The ELIZABETH RIVER TUNNEL, completed in 1952, stimulated the expanding prestige of the cities of Norfolk and Portsmouth.

The HAMPTON ROADS PROJECT, now under development, will be an outstanding accomplishment furthering transportation facilities in the State.

Engineering developments throughout the State — the George P. Coleman Memorial Bridge at Yorktown, other completed structures and projects currently under way—exemplify our contributions to the progress of Virginia.

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OF PITTSBURGH

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Cement Industry Plans Big Southern Expansion

(Continued from page 55)

the highway system, for pleasure and business.

Of course, State spending for toll roads will continue at a high level, but not high enough to overcome the big highway deficit. A Federal program therefore seems unavoidable.

Motor vehicle registrations in 1954 were 58.1 million in September. By 1965, registrations are expected to total 81 million. Some authorities believe that \$10 billion a year should be spent for roads in the next ten years, including Federal, State and public authority construction.

Last year's road construction program totaling nearly \$4 billion, it is estimated, required nearly 50 million barrels of cement. Nearly twice as much may be needed under an expanded program.

Meanwhile, the growth of population and further rises in the standard of living in this country may give rise to increased construction of homes and schools during the next ten years. Cement requirements will rise. The impact on the housing market of the bumper crop of babies during the last fifteen years will begin to make itself felt within five years, when family formation will soar.

Hence, it seems likely that last year's record-breaking shipments of 270 million barrels of cement will be substantially exceeded within the next ten years. Last year's output represented practical capacity, although theoretical capacity is 293 million barrels.

The South's dynamic growth is encouraging the cement industry to place more entirely new plants in this area than in the rest of the country. Thus, another basic industry is giving recognition to the outlook for the South. The cement makers will attempt to supply the region's needs through shipments from local plants.

New Sugar Extraction Process Developed at Fellsmere, Fla.

A new process for the extraction of sugar from its cane has been developed by the National Cylinder Gas Company, Chicago. It is said to be the first basic change in methods of extracting sugar from cane in more than 100 years. The pilot plant where the new process has been developed is located at Fellsmere, Florida.

The process is based on a "continuous diffusion" principle which takes place in a vertical cylindrical tower. The current practice, known as milling, extracts sugar juice by crushing cane between a series of rollers under high pressure. The advantage of the new method is that 97 per cent or more of the sugar-bearing juice is extracted from cane at a purity of 2 to 3 points higher than that resulting from the milling process, says National Cylinder Gas. The company also claims that the diffusion equipment is far more economical to manufacture, install and operate.

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FINANCIAL NOTES

J. Albert Woods, President of **Commercial Solvents Corporation**, informed stockholders at the annual meeting that the Company's estimated sales and earnings for the first quarter this year are better than the corresponding period last year, with a favorable outlook for continued improvement.

Mr. Woods reported that satisfactory progress has been made on construction of CSC's nitroparaffins plant at Sterlington, Louisiana. Completion is expected in the third quarter of this year. Full benefit will materialize in 1956 from this \$5,000,000 project built on CSC's exclusive position in this new field of chemistry.

Net sales for 1954 were \$51,608,349 and net earnings were \$2,668,342, or \$1.01 per share of common stock. Net sales for the preceding year were \$51,310,204, with earnings per share the same for both years.

Samuel Kipnis, president of **National Container Corporation**, told the stockholders at their annual meeting that the company's sales in the first quarter of 1955 broke all records, totalling approxi-

mately \$21,800,000, compared with \$17,448,000 in the first three months of 1954, an increase of 25 per cent.

The company's profits, after taxes, for the first quarter of 1955, Mr. Kipnis estimated, were "between 46 and 47 cents per share on the common stock, with the possibility of reaching 50 cents per share." In the 1st quarter of 1954 the firm earned 19 cents per common share.

Mr. Kipnis told the stockholders that March production at National Container's box plants was the largest for any month in the company's history, approximately 413,000,000 square feet. For the quarter, box plant production approximated 1,122,000,000 square feet, compared with 987,000,000 square feet in the corresponding period of 1954.

Net earnings of **The Youngstown Sheet and Tube Company** during the first quarter this year were \$7,975,488 or \$2.37 per common share, shareholders were told at the annual meeting recently. This compares with \$2,989,478 or 89 cents per common share for the same period last year.

A business surge which began late last

year gives evidence of continuing at least through the first half of the year, President J. L. Mauthe told shareholders.

During the first quarter this year the company shipped 912,765 tons of steel compared with 637,782 for the first quarter last year. March shipments of 356,376 set a new record high for the company.

The company's plants in the Youngstown and Chicago districts are operating at 102.5 per cent of capacity while production for the first quarter this year was 131.9 per cent of production in the 1947-49 period.

Mr. A. L. M. Wiggins, Chairman of the Board of Directors of the **Louisville and Nashville Railroad**, made the following statement recently in connection with the annual meeting of the stockholders which was held at the general offices of the Company in Louisville.

The details of 1954 operations are spelled out in the Annual Report, which most of you have seen.

A few of these results are of particular significance: There was a drop in operating (Continued on page 128)

J. N. MONTGOMERY, JR., PRESIDENT
R. H. ROBINSON, VICE PRES. & GEN'L. MFG.

A. C. ANGLE, VICE PRESIDENT
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Norfolk, vortex of the world's largest market, offers many advantages for industrial development—strategic location in the national transportation pattern, intelligent and adaptable labor, profitable sites, a cooperative reception to new industry.

MATERIALS: Vast resources! Coal dumpings at railroad piers total approximately 25,000,000 tons yearly, about 125,000 acres are being used in the production of such commodities as potatoes, peanuts, wheat; bank deposits equal about \$290,406,752 annually.

CLIMATE: Due to its longitudinal setting, Norfolk is one of the most outstanding climatic regions in the world! The annual mean temperature is 60.0 degrees, the warmest month, July averages 78.6 degrees, the coldest, January averaging 42.0 degrees.

LABOR: With a population of approximately half a million in the metropolitan area, low cost manpower is unexcelled. This is irrespective of the thousands pouring into this great port, classified as transient population, but available for temporary employment.

WORLD PORT: Excellent docking and storage facilities offer unlimited pierage with modern warehousing. Nine

railroads with belt line connections to waterfront terminals save time, money, handling and damage, thanks to this car to vessel process.

STRATEGIC INDUSTRIAL SITES: Here is unique transportation, your assurance of quick, economical movement of products to a vast market. Frontage on deep water, a Belt Line RR, truck lines, labor and power are among its many advantages.

ABUNDANT POWER: Norfolk's industrial area is favored by a liberal supply of electric power furnished by the Virginia Electric and Power Co. Since 1946 this utility has increased its generating power from 412,100 Kw. to 1,067,300 or 160%. Natural gas of approximately 1,100 b.t.u. is supplied the area and fuel oil is available in large quantities and at competitive prices. The merging of the Elizabeth and James Rivers into Hampton Roads affords service as a single port unit, accessible to four principal cities.

WRITE INDUSTRIAL DEPARTMENT B-4



NORFOLK CHAMBER OF COMMERCE

200 EAST PLUME STREET, NORFOLK 10, VIRGINIA

FINANCIAL NOTES

(Continued from page 126)
ing revenues of approximately \$36½ million from 1953. This was a result of a slight general decline in business and increased competition. Reduction in operating expenses was less than \$8 million.

A significant traffic figure for 1954 is the revenue per ton mile of 1.27 cents. This compares with 1.39 cents in 1953, a reduction of 8.6%. This reduction in revenues per ton mile reflects a loss in high-rated traffic.

Labor costs of operations absorbed 49.2% of each dollar of operating rev-

enues in 1954, compared with 45.2% in 1953. Average wage per employee increased \$137 to \$4,486.

The rate of return on net investment in 1954 was 4.39%, compared with 6.29% in 1953. Net income in 1954 was 38% less than in 1953. It was the lowest of any year since 1949.

A figure that is evidence of continuing gain in efficiency of operations is the gross ton mile per train hour. This average figure in 1954 was 47,162 as against 44,653 in 1953. There has been a continuous gain in this measure of operating ef-

iciency for a number of years, the increase in the last five years being over 35%.

Consolidated net income of \$18,192,265 or \$2.38 per share of common stock for the first quarter of 1955 was reported recently by **Republic Steel Corporation**.

For the corresponding quarter of 1954 net income amounted to \$11,079,012 or \$1.79 per share on a lesser number of shares then outstanding.

The number of common shares outstanding on March 31, 1955, amounted to 7,643,523 shares as compared with 5,956,744 shares on March 31, 1954. The increase in shares is due to the conversion of debentures and prior preference stock into common stock which occurred during this period. The common stock is now the only outstanding stock of the company.

Ingot production during the first three months of 1955 was at the rate of 93.4%, the company reported, with 2,296,747 tons produced. In the corresponding quarter of 1954, ingot production amounted to 1,710,007 tons with an operating rate of 69.4%.

Sales and operating revenue for the first quarter of 1955 amounted to \$263,273,372 as compared to \$214,469,708 for the first quarter of 1954. Net income per dollar of sales rose from 5.2 cents in the first quarter of 1954 to 6.9 cents for the corresponding period this year.

General Portland Cement Company has reported net earnings of \$1,640,200 after taxes in the first quarter ended March 31, compared with \$1,376,100 in the corresponding period last year.

On the basis of 2,079,942 shares of common stock outstanding after a 2-for-1 stock split in January, the 1955 quarter's earnings were equal to 79 cents a share as against 66 cents a share in the first three months of 1954.

Net sales were \$8,520,600, compared with \$7,476,300 in the first quarter a year ago. Before-tax earnings were \$3,098,200 as against \$2,626,100, and income

(Continued on page 132)

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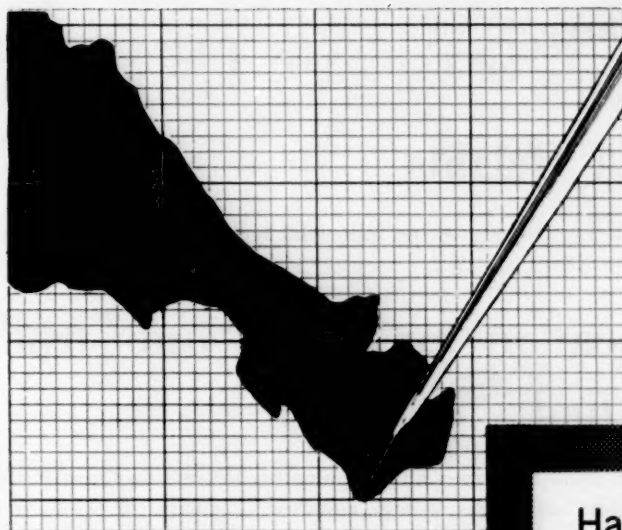
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ROCKY MOUNT, VA.

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★ **TRANSPORTATION**

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★ **INDUSTRIES**

Our industrial stability is supported by the existence of several growing and nationally known firms—Titmus Optical Co., Inc.; Brown & Williamson Tobacco Corp.; Seward Luggage Mfg. Co.; General Garment Mfg. Co.; with plants of the Continental Can Corp.; Celanese Corporation of America; Hercules Powder Co.; Nitrogen and National Aniline Divisions, Allied Chemical & Dye Corp., a short distance from the heart of our city. Numerous smaller diversified industries also exist.

★ **LABOR**

Estimated Metropolitan population 50,000; 12 Mile radius over 100,000, 99% native born loyal citizens and workers. Rapidly growing population has built good labor resources.

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FINANCIAL NOTES

(Continued from page 128)

tax provisions were \$1,458,000 as against \$1,250,000.

General Portland Cement Company operates manufacturing plants at Tampa, Fla., Chattanooga, Tenn., and Fort Worth, Houston, and Dallas, Tex.

Earnings of Lion Oil Company for the first quarter of 1955 were announced by T. M. Martin, President, as being the highest in any three-month period in the history of the company. Net income for the quarter, after provisions for taxes on income, was \$5,247,157 or \$1.70 per share of stock outstanding. This represents an increase of 51% over the similar figures for the same quarter of 1954 which were \$3,468,610 or \$1.12 per share.

Sales and operating revenues for the period were \$30,499,164 in comparison with \$26,285,357 for the first three months of the previous year. Net income before tax provisions amounted to \$7,089,795 as compared with \$5,249,107 for the same period a year ago. Provisions for taxes were \$1,842,638 as against \$1,780,497 for the first quarter of 1954.

Martin stated that the effect of the new Barton Plant is shown in the sharp increase in sales revenue.

Confidence in the continued growth of industry, business and population of the

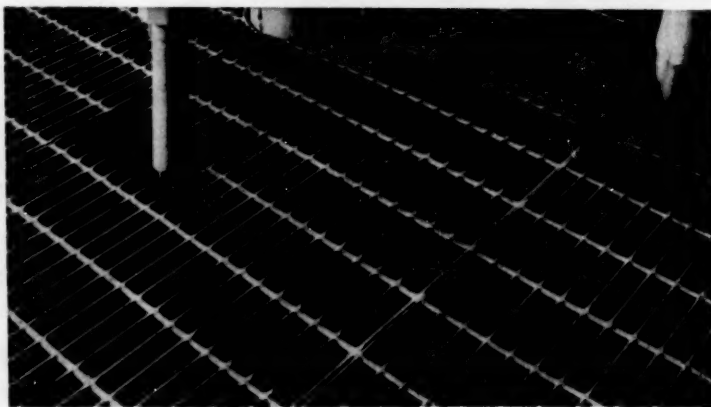
Texas Gulf Coast area was the keynote of the annual meeting of stockholders of **Houston Lighting & Power Company**, held last month in the company's Electric Building offices.

The 21 members of the company's board of directors, all of whom are residents of its service area, were re-elected to one-year terms. Directors re-elected included president W. A. Parish and four other members of the company's management staff.

The company's stockholders also approved, by more than the two-thirds majority required, amendment of its charter to increase the authorized number of shares of common stock from 6,000,000 to 10,000,000 shares.

Earnings of Philip Morris, Inc., for the first quarter ending March 31 were estimated in the neighborhood of 55 cents per common share and sales in the neighborhood of \$60,000,000 for the period by O. Parker McComas, President and Chief Executive Officer of the Company, at the annual meeting of stockholders.

Mr. McComas noted that final figures for the first quarter are not yet available and also observed that "these figures do not necessarily reflect a figure which will be projectable for the entire year since the first calendar quarter of the year is normally the lowest in sales."



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WHO'S WHERE

Philip Kerrigan, Jr., President of **Kerrigan Iron Works, Inc.**, Nashville, Tennessee, announces the addition of **Dean C. Ostrander** as Superintendent of their River Plant.

Ostrander comes to Kerrigan from **Safway Steel Products, Inc.**, Milwaukee,



Dean C. Ostrander

where he was Production Manager. Before that he was connected with **David Bradley Manufacturing Co.**, and the **A. O. Smith Corp.** as methods engineer. Mr. Ostrander is a graduate of **Purdue University** with a BSME degree.

The addition of Ostrander, together with the recent naming of **Stephen Krist** as North Side Plant Superintendent and

Ben H. Juhan as Manager of the Grating Division; and the promotion of **R. F. Jennings** to the position of Director of Safety and Personnel, is in line with Kerrigans expansion of personnel and production facilities in the manufacture of grating in all metals, sizes and types, including steel, monel, stainless steel, and aluminum.

The appointment of **A. W. Crary** and **G. C. Buchanan** as district representatives is announced by **D. B. Hanna**, Vice President in Charge of Sales for **The Union Metal Manufacturing Company**, Canton, Ohio.

A. W. Crary, for the past 31 years a street lighting specialist with the **General Electric Company**, will represent the company in **Kansas**; also in parts of **Oklahoma, Arkansas and Missouri**.

G. C. Buchanan, likewise, was a **General Electric** lighting specialist for 25 years in the states of **Texas and Oklahoma** where he will continue to operate in his new capacity.

Headquarters for **Buchanan and Crary** will be **Dallas, Texas, and Kansas City, Mo.**, respectively.

Carl D. Burkland has been promoted to the position of Chief Industrial Engineer by **Wheeling Steel Corporation**, **Wheeling, W. Va.** The announcement was made by **L. H. Brown**, Assistant Vice President.

Burkland joined **Wheeling Steel** in 1946 as a production engineer at the

Yorkville, Ohio Works. The new engineering executive is a graduate of **Miami University of Ohio**.

J. Herbert McLeroy, Jr., has been appointed sales representative in the Richmond territory for **Southern Materials Company, Inc.**, **Raymond F. Wingo**, sales manager, announced recently.

Wingo said that **McLeroy** will specialize in sales and service for the residential construction industry in the field of sand and gravel and ready-mixed concrete.

John C. Wycoff, a former district materials engineer with the **Virginia Dept. of Highways**, has been appointed Service Engineer for the **Southern Lightweight Aggregate Corporation (or SOLITE Corp.)**, of **Richmond, Virginia**.

A graduate in engineering from **Virginia Polytechnic Institute**, **Wycoff** served with the combat engineers in the European theatre during **World War II**. Since 1946, he has been employed as materials engineer with the highway dept.

In his new position **Wycoff** will act as service engineer for installations and applications of **Solite** lightweight aggregate in masonry unit construction and structural concrete.

George E. Little, who for many years has served in plant and sales supervisory capacities with leading steel fabricating and manufacturing firms, has been ap-

(Continued on page 136)

KENTUCKY FLOORING COMPANY OF VIRGINIA, INC.

ORANGE, VIRGINIA



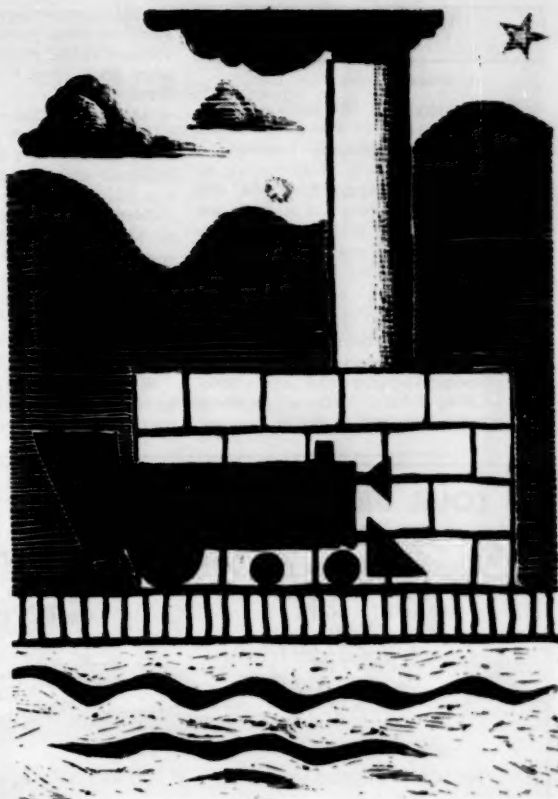
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"The New River Basin's Golden Triangle"

Located in Southwestern Virginia, blessed with the scenic grandeur of the Appalachians, counting among its assets a plentiful supply of water from the New River, excellent rail and highway transportation facilities, above average climate, two State Colleges . . . acres and acres of industrial sites, many with river frontage . . . Not the Garden of Eden, but the next best thing.



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A hardworking, conscientious and independent people is the description best fitting the natives of this area. Labor trouble is unknown in the Golden Triangle . . . Industry and labor work hand in hand with no record of strikes or strife.

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INDUSTRIAL DEVELOPMENT
COMMITTEE**

Box 772, Radford, Virginia

WHO'S WHERE

(Continued from page 134)

pointed manager of the machine products sales division of **The J. B. Beard Company, Inc., Shreveport, Louisiana.**

Experienced in both plant operations and sales engineering, Mr. Little will supervise the sales work of Beard's expanding machining division and act as liaison between customers and the plant on product design and work scheduling.

• • •

C. H. McCollam, General Manager, Steel Sales Division of **The Timken Roller Bearing Company,** has announced the following transfers and promotions.

Succeeding John J. McGrann as **Houston District Manager** is **Ralph Preston,**

a sales engineer presently working in the Houston office. Preston started with The Timken Roller Bearing Company in 1949 after graduating from the University of Kentucky. After serving a two-year stint in the United States Army, he returned to the Company first as a metallurgist, and then as a sales trainee, before he was assigned to the Timken Company's **Houston** office as a sales engineer.

Edwin E. Lightfoot, a 1952 University of Michigan graduate, who has recently completed a period as a sales trainee, has been assigned to the **Houston** office as a sales engineer. Prior to joining the Timken Company, Lightfoot served for two years in the United States Army.

• • •

Walter J. Gans, Jr., has been appointed Advertising and Sales Promotion Manager for the **Southern States Iron Roof-**

ing Company, building material manufacturers and jobbers headquartered in Savannah, Georgia, with branches throughout the Southeast.

Mr. Gans, until recently Southeastern Regional Sales Promotion Manager for the Building Products Division of the Reynolds Metals Company in Atlanta, will coordinate the advertising and promotional activities of SSIRCO throughout its entire area of operation.

Mr. Gans is a native of Richmond, Virginia, and a graduate of the University of Richmond and the Harvard Graduate School of Business Administration.

• • •

Seaboard Air Line Railroad Co., announces effective April 16, 1955, **Mr. C. Y. Shafer** is appointed Assistant General Freight Agent, with headquarters at Norfolk, Va.

• • •

Frank A. Faulkinberry has been appointed Staff Chemical Engineer of **The Rust Engineering Company,** it was announced. He will make his headquarters in the company's **Birmingham, Alabama** office.

Prior to joining the Rust organization, Mr. Faulkinberry was Chief Engineer and Plant Manager for Associated Cooperatives, Inc., Sheffield, Alabama.

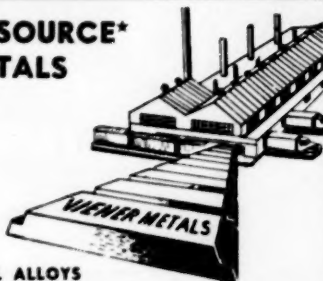
Preceding this assignment, Mr. Faulkinberry was Chemical Engineer with TVA at Wilson Dam, Alabama, handling pilot plant and full-scale plant development of chemical processes, largely in the fertilizer field.

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ROANOKE

The Expanding Industrial Heart of the NEW VIRGINIA!

Roanoke is western Virginia's trading place and industrial center (Recent area additions: General Electric's Industry Control plant with its eight million dollar payroll; Yale & Towne plant with 650 employees). The Roanoke Valley region is growing rapidly. City population now exceeds 100,000; metropolitan area, over 140,000. Nearby natural resources include large Bituminous Coal fields and hardwood forests. Roanoke Valley invites your inquiry.

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- ★ Bus Lines and over 20 highway Freight Carriers serve area
- ★ Air Lines schedule 35 flights daily at the municipal airport
- ★ Fifteen service-conscious public utilities and a modern Public Library
- ★ Excellent public schools and two nearby colleges
- ★ An alert, actively civic-minded population

BUSINESS NOTES

New manager of the Detroit steel service plant of **Joseph T. Ryerson & Son, Inc.** is **William G. Findlay**, announced Charles L. Hardy, president. He has been assistant manager since Jan. 1, 1955. He suc-



William G. Findlay

ceeds Emroy M. Vehmeyer who has retired after 46 years with the company.

Findlay joined Ryerson in 1922 and was manager of the work order department at Detroit for 11 years ending in 1939 when he assumed a similar position at the firm's Chicago plant. He was appointed manager of the Ryerson plant at Pittsburgh in 1947, returning to Chicago as work order division manager in 1949.

He remained in this capacity until his transfer to Detroit as assistant manager.

Clark Equipment Company's Automotive Division has established a field office at 403 South Peoria, Tulsa, Okla., to provide complete sales, parts and service facilities for the company's line of axles, transmissions, torque converters and complete power train packages, it was announced by C. H. King, vice president.

Wade A. Eskridge, a native of Oklahoma and a graduate of the University of Oklahoma, has been appointed manager of the field office.

The territory Mr. Eskridge will service includes Oklahoma, Texas, Kansas, Colorado, Missouri, Arkansas, Louisiana, Lea County in New Mexico and Shelby County in Tennessee.

At a meeting of the Board of Directors of **The R. C. Mahon Company at Detroit, Mich.**, April 5, 1955, **Mr. R. C. Mahon**, founder and for forty-three years President of the company, was elected Chairman of the Board.

Walter F. Sheetz, Executive Vice-President and Sales Manager for many years, was elected to succeed Mr. Mahon as President.

Other officers elected at the meeting were **Harry J. Lawther, Jr.**, Secretary-

Treasurer; **C. L. Chubbuck**, First Vice-President; **R. J. Kraemer**, Second Vice-President. **Frank J. Bomersheim**, **Les-ton F. Chatfield**, **W. Henry Duffy**, **David J. Duggan** and **Wallace Herdlein** were named Vice-Presidents.

Industrial Piping Supply Corp., P. O. Box 184, 705 North 22nd St., Bessemer, Ala., is announced as a new Parker tube fitting distributor by **D. A. Cameron**, industrial sales manager of the **Parker Appliance Co., Cleveland, Ohio**.

The new distributor, according to **R. A. Patterson**, vice president and manager, will carry extensive stocks of fittings as well as Parker tube fabricating tools to supply needs in Birmingham, Mobile, Decatur, Sheffield, Huntsville and other points in Alabama and also cities in Northwest Florida.

The **Association of Oklahoma General Contractors** will be located at 1100 Biltmore Hotel after May 1.

Mr. R. C. Cash, sales representative for **Wolverine Tube in Tennessee, Mississippi, Alabama and Eastern Arkansas**, has moved his headquarters from Memphis, Tenn., to **Birmingham, Ala.**, announced **Carl T. Fuller**, Southwestern District Sales Manager for **Wolverine Tube, Division of Calumet & Hecla, Inc.**

The new Birmingham office will locate Mr. Cash closer to the geographical center of his territory and offer Wolverine customers better service. Mr. Cash may now be reached through Wolverine's Decatur, Ala., plant.

Water-Tight Underground Conduit of Houston, Texas, and Atlanta, Ga., manufacturers of high-strength, non-metallic conduit for heated or cold fluids, vapors and chemicals, announce the appointment of the following regional representatives: **Richard Phillips & Associates, 900 East Monument Street, Baltimore, Md.**, and **Charles H. Marshall, Professional Engineer, 10 Promenade Street, Pittsburgh 5, Pa.**

In response to an increasing interest in shop equipment for measuring surface roughness, and to provide on-the-spot service in the midwestern states, **Micro-metrical Manufacturing Company, Ann Arbor, Mich.**, has appointed the following firms as Profilometer representatives:

Marshall Supply and Equipment Company, Tulsa — covering Oklahoma and western Arkansas out of offices in Tulsa and Oklahoma City.

Stanco Company — covering northern Texas and northern Louisiana out of their Dallas office, and southern Texas and southern Louisiana out of Houston.

Lockwood Greene Engineers, Inc., Architects-Engineers, announce the removal of their New York Office on May 2, 1955 to 41 East 42nd Street, New York 17, N. Y.

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Southern Pacific to Enter Petroleum Pipe Line Business

Southern Pacific Company is going into the pipe line business for the transportation of refined petroleum products, President D. J. Russell announced.

This, he said, is in keeping with Southern Pacific's aim to furnish a complete land transportation service to shippers—by rail, truck or pipe line. Plans call for formation of a new company, to be known probably as Southern Pacific Pipe Lines, Inc.

Intention is to construct pipe lines from Los Angeles refinery area to Phoenix and Tucson, and from the El Paso Refineries to Tucson and Phoenix, Russell explained. Total investment in line, stations and terminal facilities is estimated at \$30,000,000. Products to be handled will consist of regular, premium and aviation gasolines, diesel oil and jet fuel.

Movement of petroleum products between Los Angeles and Arizona points, on the one hand and between El Paso and Arizona on the other, has reached a point where construction of pipe lines is inevitable, the Southern Pacific President declared. There are presently no refineries in Arizona, this area being supplied from refineries in the Los Angeles basin and at El Paso. It is one of the fastest-growing consuming areas in the entire fast-growing territory served by Southern Pacific.

The proposed pipe line will generally follow the railroad right-of-way from Watson (Los Angeles) to Phoenix and

Tucson, serving the important intermediate areas of Colton, the Imperial Valley and Yuma. The route to be followed between Tucson and El Paso is the shortest practical one, using the railroad right-of-way where it is economical to do so. The pipe line will be of 16-inch diameter from the Watson refining area to Colton; 12-inch from Colton to Phoenix, and 8- to 10-inch from Phoenix to the El Paso Refineries, it was disclosed. The line is designed so that its initial capacity could be increased by 50 per cent.

Southern Pacific is convinced by its own studies and by a market survey made for it by the Stanford Research Institute, that the pipe line project is a very desirable expansion and diversification of the railroad's interests and activities, President Russell declared. It will enable us to get maximum use out of our private right of way, in line with continuing studies to increase utilization and financial return from such properties.

Georgia Ranks Fifth Nationally In Automobile Production—1954

According to a recent survey in Automotive News, Georgia was the nation's fifth ranking state in the forty-eight in automobile production in 1954.

Georgia's three automobile assembly plant turned out 4.8 per cent of the country's cars. There were 266,695 autos produced by the Buick-Oldsmobile-Pontiac plant in Doraville, the Atlanta Chevrolet plant and the Ford plant in Hapeville.

Missouri Pacific Attains 100 per cent Dieselization

When "Old No. 15" pulled into Bush, Illinois, on April 7, it marked the end of steam locomotive operation on the Pacific Railroad, first line to be built Missouri Pacific Lines. It was 103 years ago when the first locomotive to operate on the Pacific Railroad, first line to be built west of the Mississippi River and predecessor company of the present Missouri Pacific System, was unloaded from a Mississippi River steamboat in St. Louis.

Since 1948, Mo. Pac. has placed in service 688 diesel units at a cost of over \$100 million, bringing the total number of diesels in Missouri Pacific's fleet to 873.

Corporations Chartered in N. C. Highest in History for Quarter

More new businesses were chartered in North Carolina in the first three months of 1955 than any other first quarter in history, Secretary of State Thad Eure announced.

Corporate charters issued in the first quarter of this year totalled 529 as compared with 453 in the corresponding period of 1954. The new businesses cover a wide range—from mining in the mountains to a steel fishing pier on the coast.

Average depth of a U. S. coal mine underground is 190 feet.



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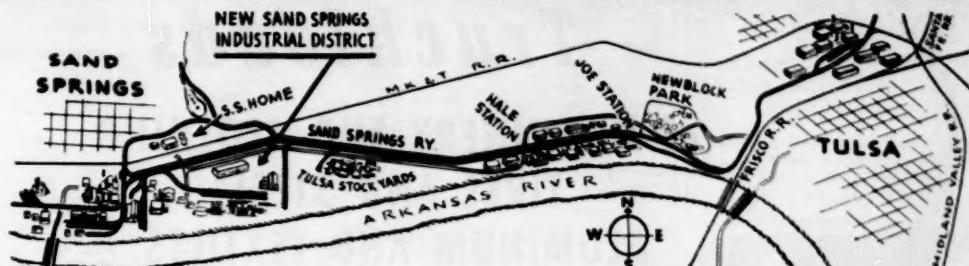
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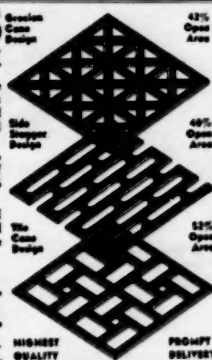
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NEW PLANTS

(Continued from page 20)

tion on city property near Municipal Building.

COLORADO CITY—Southwestern Bell Telephone Co. let contract to Suggs Construction Co., P. O. Box 3409, Big Spring for dial office building, Preston M. Geren, 1507 Fort Worth National Bank Bldg., Ft. Worth, Archt.

COOPERAS COVE—Mid-Texas Telephone Co. let contract to Eakin Construction Co., P. O. Box 494, Killen, for dial building, Arthur Mathis, Jr., 320 South Texas Bldg., San Antonio, Archt.

CORPUS CHRISTI—Hygeia Milk Products Plant received bids for plant on Chapman Ranch Rd., near Lexington Blvd. Donnelly & Whittey, 2220 Morgan, Archts.-Engrs.

CORPUS CHRISTI—Nueces County received bid of \$61,200 from Gulf Automatic Sprinkler Co., 915 W. Commerce, Dallas, for fire protection system.

CORPUS CHRISTI—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engineer, received bids for addition to Central Office Bldg. Thomas, Jameson & Merrill, 820 N. Harwood, Dallas, Archts.-Engrs.

DALLAS—Straus-Frank, 122 Howell St., let contract to Inwood Constr. Co., Trinity Universal Building, for warehouse and mezzanine, Lloyd & Morgan, 4605 Montrose, Archts.

DALLAS—Toole & Cunningham, Brookhollow Industrial District, let contract to Frank Riker, 6638 Maple Ave., at \$69,000 for warehouse and office building, 9000 Sovereign St. F. J. Woerner & Co., 1008 Stonewall St., Archt.

ESKOTA—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., let contract to Keenan Constr. Co., Snyder, for telephone repeater building.

FORT WORTH—S & H Green Stamp Co. let contract to George A. Fuller, 410 Gibraltar Life Bldg., Dallas, at \$500,000 for warehouse and office building, Wyatt C. Hedrick, Co., 1209 T & P Passenger Station Bldg., Fort Worth, Archt.

FORT WORTH—Texas State Network let contract to Thos. S. Byrne, Inc., 1307 Fort Worth National Bank Bldg., Fort Worth, for television studio, 4801 W. Rosedale, Joseph R. Pelich, Commercial Standard Bldg., Fort Worth, Archt.

HOUSTON—Automatic Distributing Corp. plans office and warehouse building, Kress St. and Harvey Wilson Drive, Milton McGinty, 2525 Ralph St., Archt.

HOUSTON—Houston Livestock Market plans stockyards and sewage disposal plant at Hary Dr. & Rankin Rd.

HOUSTON—Houston Paper Co. received bid from Fretz Constr. Co., Box 18094, at \$404,600 for office and paper warehouse, J. Russ Baty, Box 1414, Archt.

HOUSTON—Sears, Roebuck & Co. received bids for warehouse and service building, Griggs Road, John Stokes Redden, Chicago, Ill., Cons. Archt.

HOUSTON—Southwestern Bell Telephone Co. received bids for Houston North Service Center, Charles Ave. E. of intersection at Hardy Road, K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas.

HOUSTON—United States Gypsum Co. of Chicago, Chicago, Ill., plans paper plant on Ship Channel, consisting of 5 buildings.

KILLEEN—Mid-Texas Telephone Co. plans new dial exchange and business office building, Arthur Mathis, Jr., 320 South Texas Bldg., San Antonio, Archts.

LONGVIEW—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engineer, let contract to McClendon Construction Co., P. O. Box 1403, Longview, for Milton "3" Dial Building.

LUBBOCK—Armstrong Moving & Storage Co., 2303 Avenue H, let contract to West Texas Builders, Box 5035, at \$141,849 for warehouse, Dewitt & Maeker, 1203 College Ave., Archts.

LITTLE—Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, let contract to Smelly Construction Co., North Pleasanton, for community dial building.

MERKEL—Southwestern Bell Telephone Co. let contract to Keenan Construction Co., 2611 37th St., Snyder, for telephone building, K. A. Ganssle, Chief Engineer, 308 S. Akard St., Dallas.

NEW BRAUNFELS—New Braunfels Textile Mills let contract to F. A. Nunnally, Box 1567, San Antonio 6, at \$184,990 for card and spinning building.

PFLUGERVILLE—Southwestern Bell Telephone Co. let contract to Frank Rundell, 309 Bowie St., Austin, for community dial building, K. A. Ganssle, 308 S. Akard St., Dallas, Chief Engr.

PORT ARTHUR—Texas Company received bids for analytical and testing laboratory building, Stone & Pitts, 1572 Calder Ave., Archts. & Engrs.

BOSCOE—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., let contract to Keenan Constr. Co., Snyder, for telephone repeater building.

SAN ANTONIO—Austin-Hemphill, Inc., 215 Travis Bldg., let contract to Gene Treiber, 216 Newberry St., at \$81,713 for automotive building on San Pedro Ave. A. E. Associates, 215 Travis Bldg., Archts.-Engrs.

SAN MARCOS—Cone Mills, Inc., Greensboro, N. C., plan textile mill on 200-acre tract North of San Marcos.

SAN MARCOS—San Marcos Telephone Co. received bid of \$55,462 from J. C. Evans, P. O. Box 4054, Austin, for telephone building, Fehr & Granger, 502 E. Fifth St., Austin, Archts.

TEXAS CITY—Pan American Refineries let contract to Emmett F. Lowry, Box 1428, for four buildings, H. E. Gragg, 707 Hawthorne, Houston, Archt.

UVALDE—Southwestern Bell Telephone Co. let contract to Christy & Baskett, 517 Insurance Bldg., San Antonio, for alterations and additions to dial building, Phelps & Dewees & Simmons, 342 W. Woodlawn, P. O. Box 8127, San Antonio, Archts.

VIRGINIA

COVINGTON—West Virginia Pulp & Paper Co., 230 Park Ave., New York, received bid from John P. Pettyjohn & Co., Lynchburg, Va., for research laboratory building.

GLOUCESTER—Virginia Electric & Power Co. let contract to M. E. Howard Construction Co., Richmond, for service building and facilities.

LYNCHBURG—John T. Morton, president, Morton Mfg. Co., plans 2-story addition to manufacturing plant, to cost \$120,000.

NORFOLK—Rennett Garage Corporation, Baltimore, Md., plans combined ramp garage, department store and restaurant, to cost \$2,500,000.

NORFOLK—Watters & Martin, Inc., 110 W. Water St., received bid of \$84,993 for truck dock and office building from James A. Carney, Norfolk.

RICHMOND—Chesapeake & Potomac Telephone Co. of Virginia, received bids for addition and tower to building (Section "C"), 703 E. Grace St. Merrill C. Lee, 601 E. Franklin St., Richmond, Va., Archt.

RICHMOND—Reynolds Metals Co., New York, to build \$3,000,000 aluminum plant, J. Louis Reynolds, Vice-president, in charge of operations.

RICHMOND—A. R. Tiller Corp., 959 Myers St., let contract to Muhleman & Kayhoe, Inc., at \$17,768 for addition to warehouse, H. Carl Messerschmidt, Mutual Building, Archt.

ROANOKE—Dillard Paper Co., Greensboro, N. C., received bid from J. M. Turner & Co., Roanoke, for office and warehouse building, Brown & Shank, Archts.-Engrs.

YORKTOWN—Virginia Electric & Power Co. plans \$20,000,000 steam power plant on York River.

WEST VIRGINIA

NATRIUM—Columbia-Southern Chemical Corp., Pittsburgh, Pa., subsidiary of Pittsburgh Plate Glass Co., to construct plant to produce titanium tetrachloride.

MOUNDSVILLE—National Aniline Division of Allied Chemical & Dye Corporation plans multi-million dollar plant on Ohio River.



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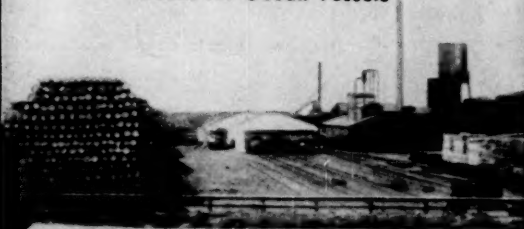
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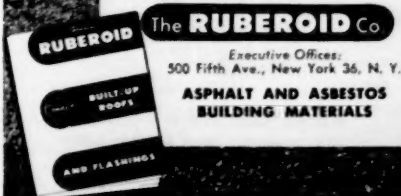
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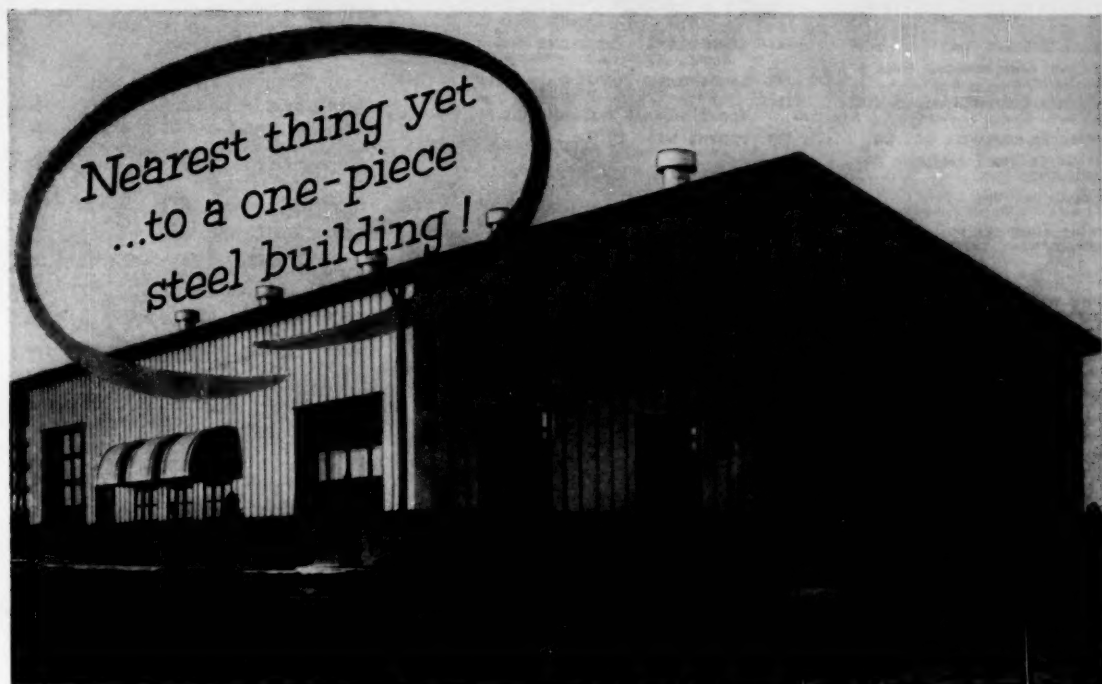
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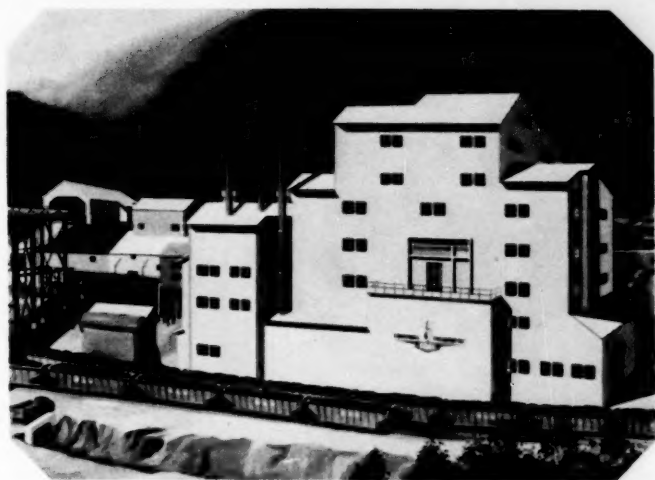
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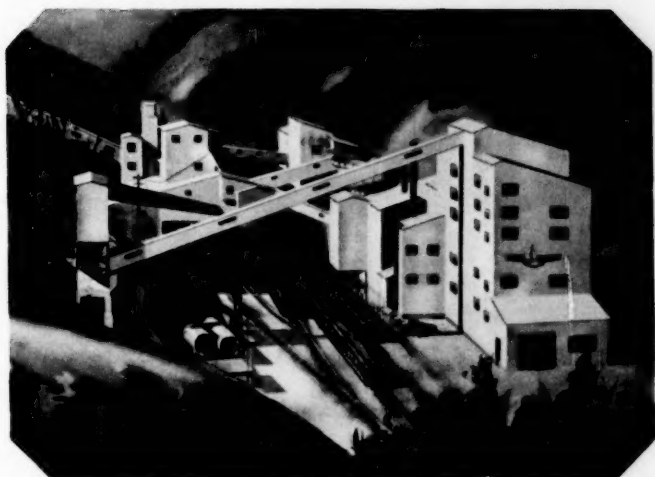


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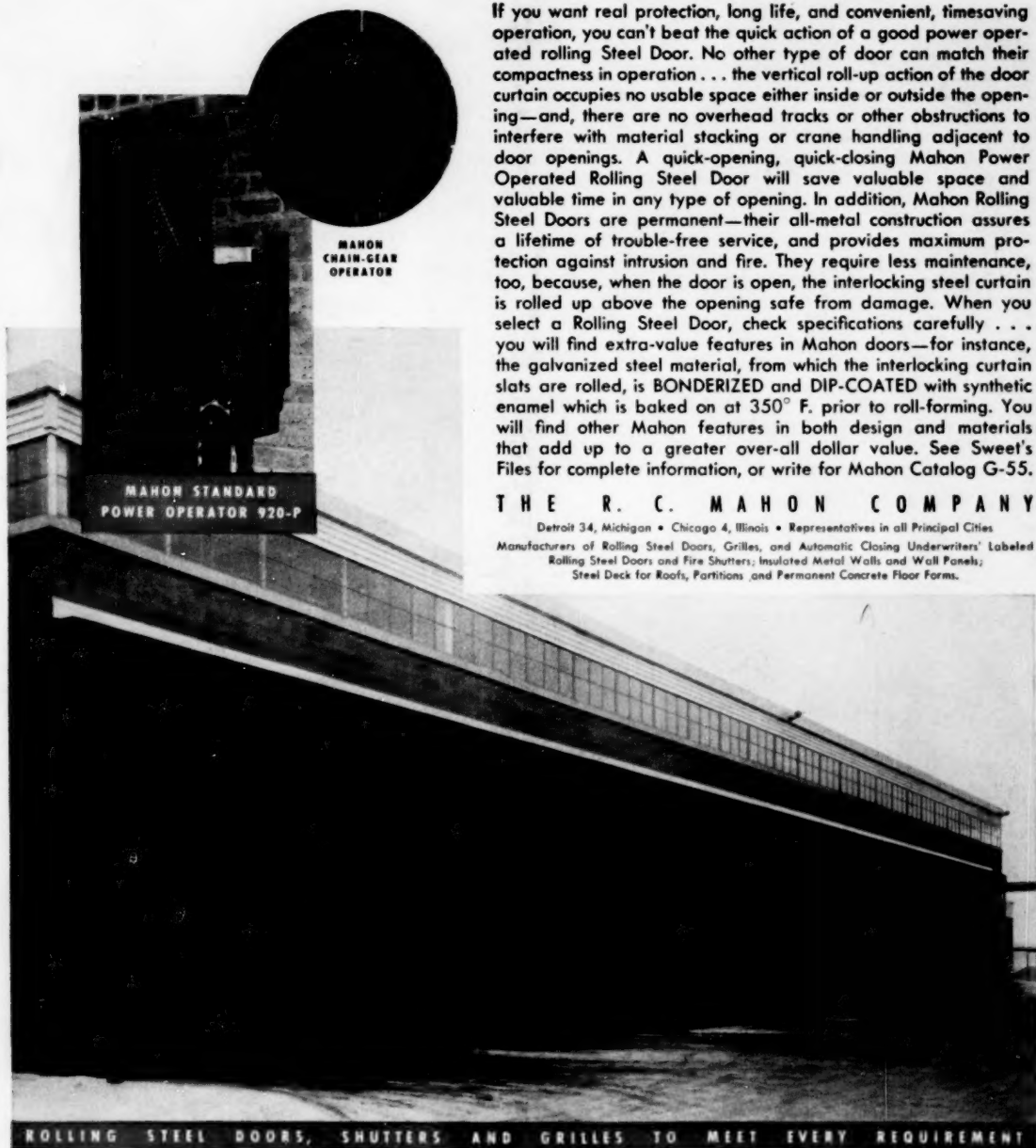
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